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Unintended pregnancies (UIPs) and STDs with their sequelae of ectopic pregnancy continue to be epidemic among active duty enlisted women. Such reproductive health problems result in major morbidity among affected women as well as posing a potential threat to combat readiness. UIPs and STDs result from complex interactions between biological and behavioral factors in military women. The ultimate control in preventing such morbidities must rely on both behavioral and biologic strategies. The primary aim of the project is to develop, implement, and evaluate an intervention which emphasizes correct information, motivation and behavioral skills building (IMB Model) coupled with non-invasive screening using urine-based amplified DNA techniques to detect C. trachomatis and N. gonorrhoeae and urine based pregnancy testing. A pre-test, post-test experimental design was employed to evaluate the impact of the behavioral intervention on the experimental group using both self-report questionnaires (UIP/STD psychosocial and behavioral risk factors) and results from the STD and pregnancy screening tests as measures. The control intervention will consist of a prevention program focusing on nutrition, breast cancer, fitness and injury prevention. Questionnaires and urine testing will be done at pre-test, mid-study, and post-test 6-12 months later. Subjects will include junior enlisted Marine women with N=1000 in the experimental group and N=1000 in the control group.

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Mary Lean Stark 8/12/98

PI - Signature Date

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5. INTRODUCTION

Unprotected sexual intercourse results in the major medical and social morbidities of sexually transmitted diseases (STDs) and unintended pregnancies (UIPs) among young sexually active women. STDs in particular result in the development of the most serious negative reproductive health outcome in women, i.e., pelvic inflammatory disease (PID) with its sequelae of ectopic pregnancy and tubal factor infertility. Like their civilian counterparts, STDs and UIPs are a significant problem among active duty women in the Navy. However, unique to active duty women, STDs and UIPs potentially threaten Navy combat readiness and result in significant fiscal and administrative costs due to personnel loss, and reassignments, as well as costly evacuations for women assigned to ships on deployments. Little data is available on the rates and interrelationships of STDs, contraceptive use, sexual behaviors, and other behavioral and psychosocial factors which influence negative reproductive health outcomes in women in the military. Therefore, to decrease such preventable morbidities in Navy women, it is imperative to develop and evaluate a biological and behavioral intervention that is specific to the needs of this target population and incorporates non-invasive screening tests. The intent of this project is to develop and evaluate such an intervention.

Specifically, the objective of this project is to decrease the rate of UIPs and STDs, thereby decreasing their sequelae of PID, ectopic pregnancy, and AIDS in active duty Navy women assigned to Navy surface ships. Ultimately, the long-term benefit of decreasing the rate of STDs, their sequelae will directly results in maintaining the health and military effectiveness of active duty service women. The specific aims of the study are to:

(A) Develop, implement, and evaluate a reproductive health educational and cognitive-behavioral skills-building intervention (behavioral intervention) designed to modify knowledge, psychosocial and behavioral risk factors associated with UIPs and STD acquisition.

(B) Test the relevance of the Information, Motivation, and Behavioral Skills (IMB) Model in explaining the determinants of behaviors associated with UIPs and STD acquisition.

(C) Define the prevalence of UIPs and STDs, emphasizing the most common bacterial agents, such as C.trachomatis and N.gonorrhoeae, and their sequelae of PID and ectopic pregnancy.

(D) Utilize pregnancy and STD diagnostic screening tests as biological markers to validate self-reported behaviors and to evaluate the impact of the behavioral intervention.

(E) Assess the performance of non-invasive, non-culture-base screening tests for the detection of as C.trachomatis and N.gonorrhoeae by ligase chain reaction (LCR) technique on first void urine compared to standard tests applied to (invasive) endocervical and urethral specimens by the presence or absence of urogenital symptoms.

STDs and PID: Setting the Stage for Ectopic Pregnancy and Infertility:

STD Rates: STDs remain epidemic among sexually active adolescents and young adults in the United States. Young adult women appear to be at particular risk as exemplified by the high rates of syphilis. In 1991 the syphilis rate for 20-24 year olds females was 54/100,000, the highest rate for any age or gender group and more than triple the overall rate for that year (2), the rate for 25-29 year old females was also quite high, 41/100,000. Gonorrhea rates are highest among 15-19 year old female. Women aged 20-24 years and 25-29 years have high rates as well: 830 and 354/100,000 respectively (2). Because of variations in diagnostic tests and reporting patterns, it is difficult to obtain an accurate rate of chlamydia infection in the United States. However, from new chlamydial cases reported annually in the United States, it is estimated that 40 million cases are reported making it the most common bacterial infection (3). Most data on genital chlamydial rates in adolescent and young adult women range from 8-15% (3, 4). While little STD data has been published on female military populations, the rates of chlamydial infections appear to parallel the civilian reports: 8% prevalence of asymptomatic endocervical infection have been reported among active duty Army women (5), and 10% have been reported among Navy women recruits (6).

PID and its sequelae: PID is the most serious reproductive health problem affecting women because of its sequelae of ectopic pregnancy and infertility. Approximately 1 million cases are recognized each year or up to 20/100,000 15-24 year old women--the peak age group for STD related PID (7). It has been estimated that as many as 5 times the symptomatic rate go unrecognized because undetected endocervical gonococcal and chlamydial infections result in asymptomatic or "silent" PID. PID most likely results from the canalicular spread of STD organisms from the infected endocervix to the uterine endometrium and on the fallopian tubes. In addition to C.trachomatis and N.gonorrhoeae, a number of microorganisms have been implicated as possible causative agents. However the focus of this study will be on the association of chlamydia and gonorrhea since they are routinely screened for young sexually active women and are found to be the most common infections associated with the development of PID in young women. Approximately 10-20% of women with untreated chlamydial or gonoccal endocervical infections will progress to PID (8). Although PID itself is a major health problem, it is the sequelae of infertility and ectopic pregnancy due to direct tubal damage that cause the major morbidity in those women affected. After one episode of PID, the infertility rate is 12%, after two episodes it is 25%, and after three episodes it climbs to 50% (8).

In addition to the chronic medical and emotional problems associated with tubal infertility, ectopic pregnancy places the woman at grave morbidity, and if unrecognized or untreated for any reason it can result in acute death. There were approximately 90,000 cases of ectopic pregnancy identified in the United States in 1988 with the rate increasing 4 fold over the last 10 years (9). Alarmingly, ectopic rates among active duty military women have consistently exceeded that of the general US population. Navy enlisted women experienced an ectopic rate of 3 per 100 pregnancies compared to 1.7 per 100 pregnancies in the general population in 1989 (10). A study of active duty women serving in Germany from 1981-1985 that the rate of ectopic pregnancies among active duty Army women was 1 in 27 births and was 1 in 32 births among Air Force women (three times that of US women in general) (11). Much of the increase in ectopic pregnancies among women is most likely due to the increase in the incidence of PID (7). It is estimated that in the United States by the year 2000, the direct and indirect costs for ectopic pregnancy alone will exceed $10 billion dollars (7). The tremendous personal and social cost of PID and its sequelae of ectopic pregnancy and infertility can be greatly reduced by preventing the acquisition of STDs and by the early recognition and treatment of asymptomatic chlamydial and gonococcal endocervical infections in young women.

Unintended Pregnancy: Indicator of Risk for Unprotected Intercourse and STD:

Over 6 million pregnancies occurred in the US in 1988 and 56% were unintended: 43% of pregnancies resulted in live births and 44% were therapeutically terminated (12). It is estimated that at any given period, 2/3 of women ages 15-44 years are at risk of UIP (40 million US women). Of these women 98%, have used contraception at some time and 10% currently use no contraceptive method. While this minority of non-users account for a disproportionately large amount of all UIPs (53%), the other half of UIPs occur in the 90% of women who report using contraception (12). Among Navy enlisted women, the pregnancy rate was reported to be 9% in 1989; the rate of UIPs in this report was 68% for E-4 and below, 37% among married and 86% among unmarried enlistees (13). Among a population of Navy women in San Diego similar to the target population for this proposal, the pregnancy rate was 24% on a destroyer tender over a 15 month period and 17.5% on a submarine tender during the calendar year 1993 (personal communication CAPT Brodine). These rates are similar to the 20% rate that was reported in a large survey study of health care requirements aboard Navy ships (14). One small study of 112 women that were being in-processed at a large Army post found that, although 90% of the soldiers stated that they understood the menstrual cycle, only 39% correctly identified the midcycle as the risk time for pregnancy (15). In another military study of women's health care needs during the deployment to the Persian Gulf, the pregnancy rate was 2.2% among in one Heavy Armor Division of the Army (16). The authors emphasized the conflict between pregnancy risk in female soldiers and combat readiness (15, 16).

Sexual Risk Behaviors as Determinants of STDs and UIPs Risk Behaviors as Determinants of STDs and UIPs:

Sexual behavior is the most critical risk factor for having a UIP and for the acquisition and transmission of STDs among sexually experienced adults. A larger proportion of younger adults (under age 25), are unmarried and are more sexually active than ever before. These factors affect the level of sexual activity and ultimately, the negative health impact of such activities, including acquisition of STDs, and UIPs. The pattern of sexual behavior in this young adult group is different than that of adolescents and older adults. Approximately 90% are sexually experienced and most have sex regularly. In contrast to older adults, only a few remain sexually exclusive for a year or more and most have had multiple sexual partners and will continue to have new sexual partners over time. However, like other age groups, younger adults are not effective contraceptors (17).

Although the risk of pregnancy is affected largely by the timing of sexual intercourse, the risk of acquiring an STD is based upon the probability of having sex with an infected partner (e.g., the partner's sexual behavior, including the number of sexual contacts and other behaviors such as sharing intravenous drugs). Moreover, as a woman's number of sexual partners increases so does her risk of encountering a partner with an STD. Every additional sex partner increases the risk of exposure to an STD and increases the likelihood that such infections will be disseminated. Thus, the number and the behavior of one's sexual partners play key roles in determining an individual's chances of contracting an STD (18).

The data on adult women's sexual behavior primarily come from the 1988 National Survey of Family Growth (19), and have been reported in numerous studies that are subject to the interpretation of the authors. The points extracted below are meant to highlight critical risk factors for young adult civilian women that may be comparable to young Navy women since limited data are available on military women in general and Navy enlisted women in particular.

Lifetime Number of Sexual Partners: The number of lifetime sexual partners quantifies cumulative risk for viral STDs and is associated with risk for acquiring new bacterial STD infections. In contrast, the number of sexual partners in a recent time period (6 to 12 months), is associated with risk for acquiring new STD infections and is thought to be a key marker of disease risk for two important reasons: 1) it reflects the likelihood of contracting an STD through multiple exposures; 2) it may reflect a greater chance of choosing an infected partner through a pattern risky partner selection (20). Data from the 1988 National Survey indicate that 67% of all women ages 15-44 who were sexually experienced had more than one lifetime sexual partner; 41% had four or more, 23% had six or more, and 8% had 10 or more sexual partners. The majority of these sexual encounters are reported to occur outside of marriage (either formerly married or never married). Age is an apparent factor linked to lifetime number of sexual partners; the highest proportion of women with more than one sexual partner occurs in the 20-34 year old age group, but the 25-39 age group is more likely to have had six or more sexual partners (18).

Current Number of Sexual Partners: 88% of the sexually active women reported having sex within the three months prior to the study; 75% of the never married and 61% of the formerly married were in this group (18). Overall, only 3% of these women reported having had more than one sexual partner during this time period; but the subset of unmarried women appear to be at particular high risk, i.e., 9% of the never married women and 13% of the formerly married women reported multiple sexual partners in the previous three months. In general, the proportion of women who reported multiple sexual partners in the previous three months decreased with increasing age up to 30-34 years. Unfortunately, these data do not provide insight into whether these multiple-partnered relationships occurred in a pattern of serial monogamy or in multiple concurrent relationships by what types of sexual behavior was practiced (18). In general, the best predictors of having multiple sexual partners are: unmarried marital status, male gender, less than 30 years of age, and African-Americans race(17).

Use of Contraception: Clearly, men and women whose goal is to avoid both UIPs and STDs are likely to use more effective contraceptive methods in a more consistent manner. However, of the women who reported sexual activity in the previous three months, 79% were at risk for a UIP, but because they had only one sexual partner they were not at concurrent risk for an STD; 3% were at risk for both UIPs and STDs 17% were not at risk for either outcome (18).

Use of barrier-method contraceptives to prevent pregnancy is not related to multiple partner status. Although 20% of sexually active women report use of condoms, only 9% use them to prevent pregnancy, 7% use them to prevent STDs, and only 4% use them to prevent both pregnancies and STDs. Women who are at risk for both STDs and pregnancy tend to use a combination of methods. To determine use of condoms as well consistency of condom use, results of multiple logistic regression analyses were performed. The results indicate that: 1) unmarried women are significantly more likely to use condoms, although they have more difficulty achieving effective use than married women who use condoms. 2) Women with multiple sexual partners are no more likely than those with only one sexual partner to report the use of condoms; however, women with multiple sexual partners have significantly more difficulty in using them consistently. This finding may indicate less committed relationships or may reflect the need to renegotiate use of condoms with each different partner, thereby decreasing the likelihood that condoms will be used as the number of partners increases (18).

Psychosocial Factors and Other Behavioral Determinants of STDs and UIPs:

An important first step in preventing negative reproductive health outcomes in women is to understand psychosocial and other behavioral factors that influence risk of UIPs and exposure to sexually transmitted infections. For example, it is important to understand the factors that influence women's selection of sexual partners as well as the processes that influence their contraceptive decisions, in particular how they negotiate the use condoms, since it is their male partner who ultimately has to wear the condom. Unfortunately only a few studies have attempted to explain these factors in women. One

study examined the role of variables taken from social-cognitive theory (i.e., perceived self-efficacy, perceived risk, perceived social norms, negative outcome expectancies of condoms, and knowledge), sexual behavior, and alcohol and drug use among sexually active unmarried college students.

The results indicate that although men expected more negative outcomes of condom use and were more likely to have sexual intercourse under the influence of alcohol and other drugs, women reported higher perceived self-efficacy to practice safer sex. Multivariate analyses reveal that stronger perceptions of self-efficacy to engage in safer sexual behaviors, fewer negative outcomes of condom use, and less frequent alcohol and drug use with sex were the best predictors of safe sexual behaviors (21). Another study of African-American women college students tested elements of the Theory of Reasoned Action, including constructs on attitudinal and normative influences on intentions to use condoms.

Results of multivariate analyses indicate that women who held more favorable attitudes towards condoms and those who perceived subjective norms (i.e., their sexual partner and mother) as more supportive of condom use reported firmer intentions to use condoms within the next three months (22). Young adult college men and women ages 17-24 were studied regarding the factors associated with their planned and unplanned sexual behavior. Forty-seven percent of the men and 57% of the women had sex on an average of 1 to 5 times primarily because they were intoxicated. During these risky sexual encounters only 17% of the men and 21% of the women reported use of condoms. Moreover, 19% of the men and 33% of the women acknowledged consenting to sex while intoxicated because they felt awkward refusing to engage in sex (46). A study of contraceptive decision-making among unmarried women with a current unplanned pregnancy show that women with only one sexual partner are more likely to be solely responsible for decision-making about the choice of contraceptive methods, and are not as likely to use alcohol or drugs in conjunction with sex when compared to women with multiple partners (23). A study of sexually experienced women Marines examined the effects of reviewing (selective focus) sexual and contraceptive behavior on perceived vulnerability to unplanned pregnancy.

The results indicate that a review of pregnancy-related behaviors decreased perceived vulnerability among women who considered unplanned pregnancy to be an undesirable event and those who held a high sense of self-efficacy about their ability to prevent unplanned pregnancy. The authors conclude that selective focus on preventive behavior fosters an false sense of invulnerability among the women Marines (24). Finally, data from a world wide survey of military personnel of all ages was compared to a comparable sample of civilians. The results show that although military women use fewer nonprescription drugs than civilian women, alcohol use is significantly more common among the younger military women aged 18-25 years than their civilian counterparts (25).

Although the studies reviewed emphasize different critical points, they offer insight into the complex nature of contraceptive and sexual behavior in women as well as the multiple determinants of these behaviors. However, they do not provide a clear conceptual framework in which to build and test theoretically-sound models to explain and predict both risky and preventive behaviors. Such models are necessary to develop

effective behavioral interventions to prevent the negative reproductive health outcomes of UIPs and STDs in women. There is an obvious need for research which examines the multiple factors that influence the risk and prevention of UIPs and STDs in women. In particular, studies which recognize the factors that are unique to deployed enlisted Navy women are clearly warranted. The model utilized for the proposed study is described below and is builds on constructs that are thought to be generalizable determinants of preventive health behaviors in the target population of interest.

Theoretical Approach: Information, Motivation, Behavioral Skills (IMB) Model:

(26, 27), includes constructs that have emerged from the AIDS risk reduction literature as potential determinants of AIDS preventive behavior. It incorporates constructs from social-cognitive theory (28), the theory of Reasoned Action (29, 30), the Health Belief Model (31-33), the AIDS Risk Reduction Model (34), and work on the motivational and behavioral bases of AIDS preventive behavior (35, 36). The IMB posits that *Information, Motivation,* and *Behavior* are the primary determinants of preventive behavior.[1] Specifically, the model asserts that: Information regarding the transmission of negative reproductive health outcomes (e.g., STDs and UIPs), and information concerning specific methods of preventing these outcomes (e.g., condom use, decreasing the number of partners) are necessary prerequisites of risk reduction behavior. Motivation to change risk behaviors is a determinant of prevention and affects whether one acts on one's knowledge regarding the transmission and prevention of STDs and UIPs. The IMB conceptualizes motivation in accordance with the Theory of Reasoned Action; that is, motivation to engage in preventive behaviors are a function of one's attitudes toward the behavior and of subjective norms regarding preventive behaviors. Other critical factors which are hypothesized to influence motivation to engage in preventive behaviors are perceived vulnerability to STDs and UIPs, perceived costs and benefits of engaging in preventive behaviors, intention to engage in preventive behaviors regarding STDs and UIPs, and the characteristics of the sexual partner and or the sexual relationship (primary vs. secondary partner). Behavioral skills for engaging in specific preventive behaviors are a third determinant of prevention and affect whether even a knowledgeable, highly motivated person will be able to change his or her behavior to prevent negative health outcomes. Requisite skills to engage in preventive behaviors include the ability to effectively communicate with one's sexual partner about safer-sex, to refuse to engage in unsafe sexual practices, to properly use contraceptive/protective methods (barrier and non-barrier), to be able to leave a situation when preventive behaviors are not possible. In addition to possessing these skills, individuals who are able to practice preventive skills are presumed to have a strong self-belief (self-efficacy) in their ability to practice these preventive behavioral skills. Overall, the IMB asserts that information and

[1]Although the primary emphasis of this and other theoretical research have focused on AIDS risk and prevention in particular, we argue that STD-related behavior and behaviors that give rise to unintended pregnancies are similar to those that are related to AIDS. Therefore, we are extending this model to include other negative reproductive health outcomes such as STDs and UIPs. Thus, in addition to explaining and predicting behaviors associated with the risk of STDs and UIPs, the IMB will also be utilized to predict STDs and UIPs.

motivation "triggers" behavioral skills to affect the initiation and maintenance of preventive behaviors.

In a practical manner there are three critical factors for implementing preventive interventions based on this conceptualization: 1) for each target group of interest it is imperative to perform elicitation research to identify the existing level of knowledge, the specific determinants of motivation to reduce the risk of STDs and UIPs, and the existing skills in the target population. 2) On the basis of data accrued from elicitation research it is necessary to develop a preventive intervention that is group specific. 3) Finally, it is critical that methodologically sound evaluation research is carried out to determine whether the group-specific intervention has resulted in both short- and long-term changes in each of the indicators of information, motivation and behavioral skills and to determine to what degree changes have occurred in long-term behavior change.

Summary:

A complex interaction of biological and behavioral factors result in women experiencing the major reproductive morbidities of UIPs and acquisition of STDs. The acquisition of STDs are particularly harmful to women because of their associated serious sequelae of infertility and ectopic pregnancy. Therefore, the ultimate control of preventing such reproductive morbidities must rely on both behavioral and biologic strategies. The primary objective of behavioral strategies should be to prevent or modify psychosocial and behavioral factors that lead to UIPs and STDs. Measurable behavioral outcomes should include increases in preventive behaviors such as limiting sexual partners, and using consistent contraception including condoms. The overall goals of the biologic approach should include development of noninvasive screening tests for STDs in women. Using such a noninvasive test in an active STD screening program, should facilitate the early detection and treatment of asymptomatic infection and therefore, should lead to a decrease in PID and its sequelae of infertility and ectopic pregnancy. The focus of this project will be to decrease the rate of UIPs and STD acquisition through the development, implementation and evaluation of an intervention which integrates the behavioral and biological approaches. The intervention's behavioral approach emphasizes correct information, motivation and behavioral skill-building to decrease risky behaviors and increase preventive behaviors regarding UIPs and STDs. The biological approach emphasizes early screening of asymptomatic STD infections by noninvasive methods resulting in early identification and treatment of STDs. A major strength of this project is its unique ability to validate self-reported behavioral change linked with urine-based testing for gonorrhea and chlamydia as well as pregnancy as a part of evaluating the impact of the proposed preventive intervention.

Hypotheses:

(1) Subjects participating in the behavioral intervention will: (a) have increased knowledge about the risks and prevention of negative reproductive health outcomes (UIPs and STDs); (b) be more highly motivated to change risk behaviors associated with negative reproductive health outcomes; (c) have higher levels of skills to prevent negative reproductive health outcomes; (d) engage in more preventive health behaviors resulting in fewer negative reproductive health outcomes compared to subjects who receive a control intervention that is comparable in the length of time and opportunity to practice skills such as basic life support.

(2) The IMB model will describe and predict significant relationships among important antecedents of risk behaviors associated with UIPs and STD acquisition. Specifically, women who do not have adequate knowledge about the transmission and prevention of UIPs and STDs and who are not sufficiently motivated to change at risk behaviors (e.g., have negative attitudes towards STD and pregnancy prevention behaviors, have perceptions that significant others oppose their performance of certain prevention behaviors, and do not intend to change at-risk behaviors); and who do not have adequate skills (e.g., ability to discuss safer sex, refuse unsafe sex) will be at increased risk for and, thus will have higher rates of UIPs and STDs.

(3) The prevalence of STDs, especially C.trachomatis and N.gonorrhoeae will be at epidemic rates among sexually experienced service women, placing them at increased risk for negative reproductive health outcomes (PID, ectopic pregnancy, tubal infertility).

(4) Pregnancy and STD diagnostic screening tests will result in appropriate biological markers to validate self-reported behaviors and thus will be utilized to evaluate the impact of the behavioral intervention.

6. BODY

The research methods, results, and discussion are described below in relation to the Statement of Work for the grant period August 7, 1997-August 6, 1998. Overall plans for Year 3 of the project included the following tasks: a) Completion of the development of the experimental intervention; b) Development of the control intervention; c) Pilot testing of the interventions with a comparable target population; d) Completion of the development of the evaluation instruments (questionnaires) including pilot testing of the instruments; e) Completion the development of the clinical and laboratory protocols for STD screening; f) Identification and training of selected Preventive Medicine Technicians; and g) Implementation of the intervention with the target population.

Summary of Year 3 Accomplishments and Overview of Materials in the Body Section of Report:

This year has been spent participating in numerous briefings with appropriate commands in charge of the target population, women Marine recruits at Parris Island, South Carolina. A copy of a typical briefing packet used this year is included in ***Appendix A.*** Most of the work effort this past year was spent developing and completing the experimental intervention to prevent STD's and Unintended Pregnancy, *Choices,* and on the control intervention on nutrition, fitness and injury prevention, *Fitness for Life*. An overview and selected materials from the manual for *Choices* is found in ***Appendix B;*** an overview and selected materials from the manual for *Fitness for Life* is found in ***Appendix C.*** In addition to the actual development of the interventions, assessment tools were also developed for each intervention. The questionnaire for *Choices* is found in ***Appendix D*** and the questionnaire for *Fitness for Life* is found in ***Appendix E.*** We are also in the process of updating our human use approval and submitted our revised consent form to both the University of California, San Francisco Committee on Human Research (pending) and to the Beaufort Naval Hospital human use committee (pending). The revised consent form is located in ***Appendix F***. The Study Design is found in ***Appendix G***, and the Study Timeline is located in ***Appendix H***. The request and justification for additional support submitted to your agency is found in ***Appendix I.***

(A) Select a group of surface destroyer and submarine tender ships to focus initial data collection of which two ships will be targeted as study ships for the current study *(Current design focuses on land-based Marine women recruits at Parris Island as described below).*

This year has been spent finalizing the target population selection and completing the development of the experimental intervention, *Choices,* and the control intervention, *Fitness for Life*. Numerous briefings have been held with the appropriate commands at Parris Island Marine Base in South Carolina.

Marine Recruitment Center, Parris Island, South Carolina, trains 1500-2000 women Marines annually. After the 13 week "boot camp", women participate in a 3 week "MCT" or Marine Corps Training experience, i.e., basic infantry training for all Marines. The women are then assigned for further training at a number of schools for 3-6 months depending upon their specialty of study. These schools are located at only 3 Marine bases. It became obvious to us through our initial briefs and elicitation research that women Marine recruits at Parris Island are the most ideal to target for the intervention because they afford us the numbers of subjects needed (over 2000 per year), and they are located in a predictable limited number of sites during the study period and could be potentially tracked longitudinally, i.e., Camp LeJeune, North Carolina, bases in Southern California, and in Okinawa, Japan.

(B) Brief the Commanding Officers (COs) of the Target Populations

During the year we conducted numerous briefs with the commands at Parris Island (see ***Appendix A***).

Marine Women:

Marine Recruitment Training Center, Parris Island, South Carolina; Camp LeJeune, North Carolina: During this past funding year Capt. Brodine and LCDR Rick Shaffer gave several briefings to the command and medical staff at Parris Island regarding the project. There were also numerous telephone conference calls as the project has progressed in its development. From the briefings it became clear that there are approximately 80-120 women recruits processed at this training center every 2-3 weeks yielding 1500-2000 women Marines each year. From the focus groups conducted with women Marines (see Section C below) it appeared that young Marine women are at greatest risk for both STDs and unintended pregnancies during their first 6-12 months in the Corps. It also appeared feasible to recruit, implement the intervention and follow these women over time as well within this setting. Therefore, women Marine recruits have become the target population for our intervention efforts.

In addition to our ongoing communication efforts with the command at Parris Island, our research team, Drs. Shafer, Boyer and CAPT. Brodine and CDR Shafer, conducted a number of important briefs about the project content and logistics with the command of the 4th Battalion at Parris Island during the week of April 27, 1998. The first briefing consisted of CMDR Evertson (acting XO) and COL Angie Salinas (commanding officer) of the 4th Battalion (women Marine recruits battalion). Both of these officers changed posts on July 1, 1998. At the April briefing, we presented the entire program and they assisted us in problem solving regarding the steps needed to have the program integrated into the very tight recruit training program schedule. They suggested that if the program proves successful, they would support its integration into recruit training and that the Drill Instructors would be the natural professionals to teach the program. The change of command of the 4th Battalion in July, 1198 has necessitated our rebriefing starting with contacts at General Mudder's office at Marine Headquarters. General Mudder was briefed by our research team in February, 1997 and strongly urged us to

focus on the women Marine recruits at Parris Island whom she felt were at high risk for both STDs and unintended pregnancy. Once we receive their official support again, we will proceed to brief the new command at Parris Island.

(C) Conduct elicitation research (focus groups) in order to develop a self-report question to assess knowledge, attitudes, and beliefs, and behaviors of the target population and to develop a military-specific behavioral intervention to reduce risk or UIPs and STDs in the target population. *(Includes a summary of focus groups and the specific development of the experimental intervention,* ***Choices,*** *and the control intervention,* ***Fitness for Life*** *during past funding year 3).*

Study Intervention Development:

Most of the efforts of conducting focus groups was done during funding year 2 of the project. The efforts this year (funding year 3) were conducted to finalize both the format and content of the experimental intervention including the didactic and skill-building exercises as well as the vignettes and story-line for the educational video to be developed. Several focus groups which consisted of enlisted Marine women, non-commissioned officers and officers were conducted to critique the components of the intervention including the video script and characters for content, format, relevance, among other issues on December 18, 1997 at the Marine Training Center, San Diego. Suggestions from the groups were evaluated by the research team and changes were made in the script subsequently. The filming of the video (rough cut) was completed with a production company in Florida, Paradise Video, during the weeks of February 7-21, 1998. Drs. Boyer and Shafer were consulting during all phases of the film production and Sgt. T. Harris, the Marine Training Center, San Diego, acted as the military consultant for the production to ensure accuracy and credibility. This video contains realistic scenarios of choices and consequences of sexual activity focusing on the unique situation for women in the Marine Corps: career demands, high male to female ratio, new and increased male attention and male social norms, isolation and loneliness.

After review by the research team in consultation with the video production company, the final edit was completed. During the official briefing with the command of the 4th Battalion during the week of April 27, 1998 we piloted the finished video, "Good to GO" , with the target audience, a platoon of women Marines who had just completed their recruit training and were set to graduate the following week. Present were all women in the platoon, and their Drill Instructors as well as Drs. Boyer and Shafer. As discussed before, this video contains realistic scenarios of choices and consequences of sexual activity focusing on the unique situation for women in the Marine Corps: career demands, high male to female ratio, new and increased male attention and male social norms, isolation and loneliness. The video was received enthusiastically by both the young recruits and their Drill Instructors. We held a 90 minute debriefing with the entire group after they viewed the video. As we had planned, the video was able to elicit much discussion about the risk of specific behaviors linked to STD acquisition and unintended

pregnancy. In addition, the women were very verbal in discussing how the film was able to bring up the important points as to how to avoid situations which would place a young woman Marine like themselves at risk for problems. The Marine leadership (Drill Instructors, Navy Clinical personnel from the Medical Clinic on base who administer the women's health component of care) present were also very enthusiastic with the video and how it was to be used as a part of a prevention program.

The manual and support materials for the STD and UIP prevention intervention (*Choices*) are competed (manual, handouts, activities, slide sets) and are ready for selective piloting with the target audience as soon as approval from the Marine Command is obtained.

Control Intervention Development:

The control intervention (*Fitness for Life*) which focuses on common non-reproductive health issues for women especially nutrition and fitness, is also completed. The manual for the control intervention is also completed. The slides for the control intervention are finished and the appropriate handouts and videos that are part of the program have been obtained. The control intervention is also ready for selected piloting with the target audience as soon as approval from the Marine Command is obtained.

(D) Review STD logs and clinical records to establish the prevalence of reproductive health outcomes in the target population.

We reviewed the most recently collected medical clinic data on reported STDs in the women's clinic at Parris Island (April, 1998). On screening, the chlamydia prevalence rate using DNA amplification (LCx), Abbott laboratory) among incoming recruits was 7% and the gonorrhea rate was 1%. If they had symptoms of vaginitis a wet mount was performed. The overall rate of trichomonas was approximately 1-3 %. All women also had screening Papanicolau smears done at the entry pelvic exam. Twenty-six percent of these were considered "abnormal". The exact break down of the abnormalities were not yet available. We are currently attempting to determine STD rates at the other military sites where our follow-up will occur. However, these are difficult to determine since there is no standard requirements for STD reporting within the clinics serving Marine women.

(E) Test the feasibility of non-invasive STD screening tests (urine) for chlamydia and gonorrhea in comparison to standard invasive tests :

This goal was achieved in Year 1 of the project.

(F) Test the acceptability of screening for pregnancy in the target population.

This goal was achieved in Year 1 of the project.

7. CONCLUSIONS: PLANS FOR YEAR 4 OF THE PROJECT

Plans for Year 4 of the Project include the following tasks: (A) Complete the development of the experimental and pilot interventions; (B) Pilot test the experimental and control interventions with comparable target population; (C) Complete the development including the pilot testing of the evaluation instruments (questionnaires) for both the experimental and control components of the project; (D) Complete the development of the clinical and laboratory protocols for STD screening; (E) Identify and train selected health educators and research assistants to implement the project; (F) Implement the interventions with the target population; (G) Develop the formal analysis plan and begin analysis with the baseline data; and (H) Develop and implement a plan to secure the needed additional support to accomplishments the implementation of the intervention as the Study Design (**Appendix G**) and Timeline (**Appendix H**) has changed resulting in an expansion of personnel needs.

(A) Complete the development of the experimental and control interventions: The experimental and control interventions will be finalized after piloting of components takes place in the first quarter of year 4.

(B) Pilot test the experimental and control interventions will be piloted with the appropriate target population, changes to the interventions will be made if warranted and the implementation of the project will begin.

(C) Complete the development of the evaluation instruments (questionnaires): The questionnaires for each component have been completed, will be piloted and any needed changes incorporated for use during the first quarter of year 4.

(D) Complete the development of the clinical and laboratory protocols for STD screening: The development of the final protocols for the collection, transport and processing of all clinical laboratory specimens will be completed in conjunction with Medical protocols at the participating military sites.

(E) Identify and train selected health educators and research assistants to implement the project Identify: Selected research personnel will be hired and trained to implement the interventions including recruitment of subjects, supervision of collection of clinical specimens, teaching the content in the manuals and performing the necessary tasks to ensure adequate follow-up of subjects longitudinally under the direct supervision of the Project Directors.

(F) Implement the intervention with the target population: Implementation of the intervention will be accomplished in year 4 of the project. is described below.

(G) Develop and implement a plan to secure additional support: Current efforts are underway to obtain additional funding through your agency to complete the expanded mission of the project.

In particular, the next quarter is critical to the success of the project and will include finishing briefing the new commanding officer of the 4th Battalion, organizing the schedule for implementation during recruit training at Parris Island, piloting the experimental and control interventions and questionnaires, finishing the development of the biological protocol for STD collection of specimens, hiring appropriate research

assistants to be trained to implement the project, developing the analysis plan for the data as it is accrued and begin the implementation of the project.

It is important to note at this juncture that because we responded to the request by General Mudder, Marine Headquarters (during a briefing with her in February, 1997), to bring this intervention to women Marines during recruit training, *the nature, size and timeline of the project had to be expanded and changed markedly from our original inception.* A more detailed description of the changes made in selection of the target population and the design changes that are necessary to work with this group are outlined in more detail in two memos dated May 6 and May 7, 1998 to LT COL Karl Friedl requesting supplemental funding **(Appendix I).**

In brief, to fulfill the current expanded mission, additional supplemental funds are needed to hire additional research staff and an additional year is requested. The main reason for this is the fact that the recruitment, implementation of the intervention, and the 6-12 month follow-up (3 different bases including North Carolina, Southern California and Okinawa where most women receive their first assignment after school) will be done in a rolling fashion with new recruits entered every 2-3 weeks. As mentioned above, in May, we sent a formal request for additional funding to be considered by the parent funding agency to LT COL Freidl. We are now awaiting word of the possibility of end of year funds being directed to us in order to complete the study.

Because of this change in design and scope of the project over the past year (see above), we reassessed the power calculations which shows us that between 1500-2000 subjects divided evenly between the experimental and the control interventions will be needed. This will take approximately 9-12 months to accrue these numbers with the rolling recruitment of subjects as they enter their recruit training at Parris Island (about 80-120 women enter the Marines every 2-3 weeks). In order to accommodate these numbers and be able to follow them from 6-12 months after entry into the study at T1, it will be necessary to extend the project to a 5th year.

In addition, we have been delayed in our progress towards implementation of the project by the need to revisit the approval process from Marine Headquarters to the new commanding officer staff at Parris Island with the "change of the guard" of leadership at the commanding officer level of the 4th Battalion. We are continuing to proceed with this as requested by the CO's office.

In summary, we are ready to implement the project as soon as Marine Headquarters and the Command at Parris Island are rebriefed and approve. In addition, to implement the project we need additional funds and an additional year to accomplish all the needed tasks. This is a crucial time since the entire project has been developed and is ready to go! This is the only cognitive-behavioral intervention to prevent STDs and unintended pregnancy and to improve the health and readiness for military women. We need your assistance in order to be successful in the implementation of this exciting project.

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APPENDIX A:

Briefing Packet

"CHOICES"

A PROGRAM TO PREVENT UNPLANNED PREGNANCIES AND STDS IN JUNIOR ENLISTED WOMEN MARINES

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PROGRAM OBJECTIVE

To prevent unplanned pregnancies and sexually transmitted diseases in junior, enlisted women Marines.

PROGRAM DEVELOPMENT

ELICITATION OF INFORMATION (FOCUS GROUPS)

Parris Island

- 4th Batallion, Drill Instructors

Camp LeJeune

- MCT, Junior Enlisted Women Marines

Camp Pendleton

- 1st FSSG, Junior Enlisted Women Marines
- 1st FSSG, Senior Enlisted Women Marines

MCRD

- RTR, Junior Enlisted Women Marines
- RTR, Senior Enlisted Women Marines

PROGRAM GOALS

- Educate participants about the risk and impact of unplanned pregnancies, STDs and HIV
- Provide participants with factual information about effective methods of contraception and STD outcomes
- Develop participants' communication and decision-making skills regarding sexual behaviors and use of contraception
- Familiarize participants with the basics of a GYN exam and the female reproductive anatomy
- Provide participants with information about the effects of alcohol use

PROGRAM OVERVIEW

Approach

- Information
- Skills Building Techniques

Strategies

- Didactic Slides
- Interactive Group Exercises

Format

- 8 Hours of Training

  (4, Two-Hour Sessions)

RISK FOR UNPLANNED PREGNANCY AND STDs

- Low self-esteem
- Media influences
- Alcohol and drug use
- Lack of information
- Lack of access to care
- Difficulty in negotiating with partner
- Other

CONTRACEPTION CONSIDERATIONS

- Availability
- Effectiveness
- Protection against STDs
- Ease of use
- Safety
- Cost
- Control
- Reversibility
- Values and beliefs
- Control over use

CONSEQUENCES OF UNPLANNED PREGNANCIES

- Emotional-psychological
- Interruption of career
- Financial

STD/HIV TRANSMISSION

CONSEQUENCES OF STDs IN WOMEN

- Passed to babies during pregnancy/birth
- Tubal blockage ⟶ infertility
  ⟶ ectopic pregnancy
- Cervical cancer
- Increase vulnerability to HIV/AIDS

STDs/HIV ARE PREVENTED

BY:

- Abstinence
- Safe sex
- Monogamy
- Honesty with partner about past sex
- Screening tests for STDs
- Not using unsterile needles

BLOOD ALCOHOL EFFECTS

.02% Feel some effects, driving skills impaired

.04% Begin to feel relaxed

.06% Judgment is impaired

.08% Problem with coordination, driving skills, nausea, slurred speech

.10% Reaction time dramatically reduced

.15% Balance and movement impaired, risk of blackouts and accidents dramatically increased

.30% Most people lose consciousness

.35% CNS is substantially depressed, risk of death

ROLE-PLAY EXERCISE:
"LET'S TALK ABOUT SEX AND CONTRACEPTION"

Imagine that you are in the beginning weeks of a new relationship. You really like this guy a lot and think this relationship has the potential to develop into something special. But you want it to be different than previous relationships. You've promised yourself that in any new relationship you will start off by being open and honest in talking about sex before you're in the heat of the moment. You also realize that beginning the conversation is difficult and a little scary. What do you say?

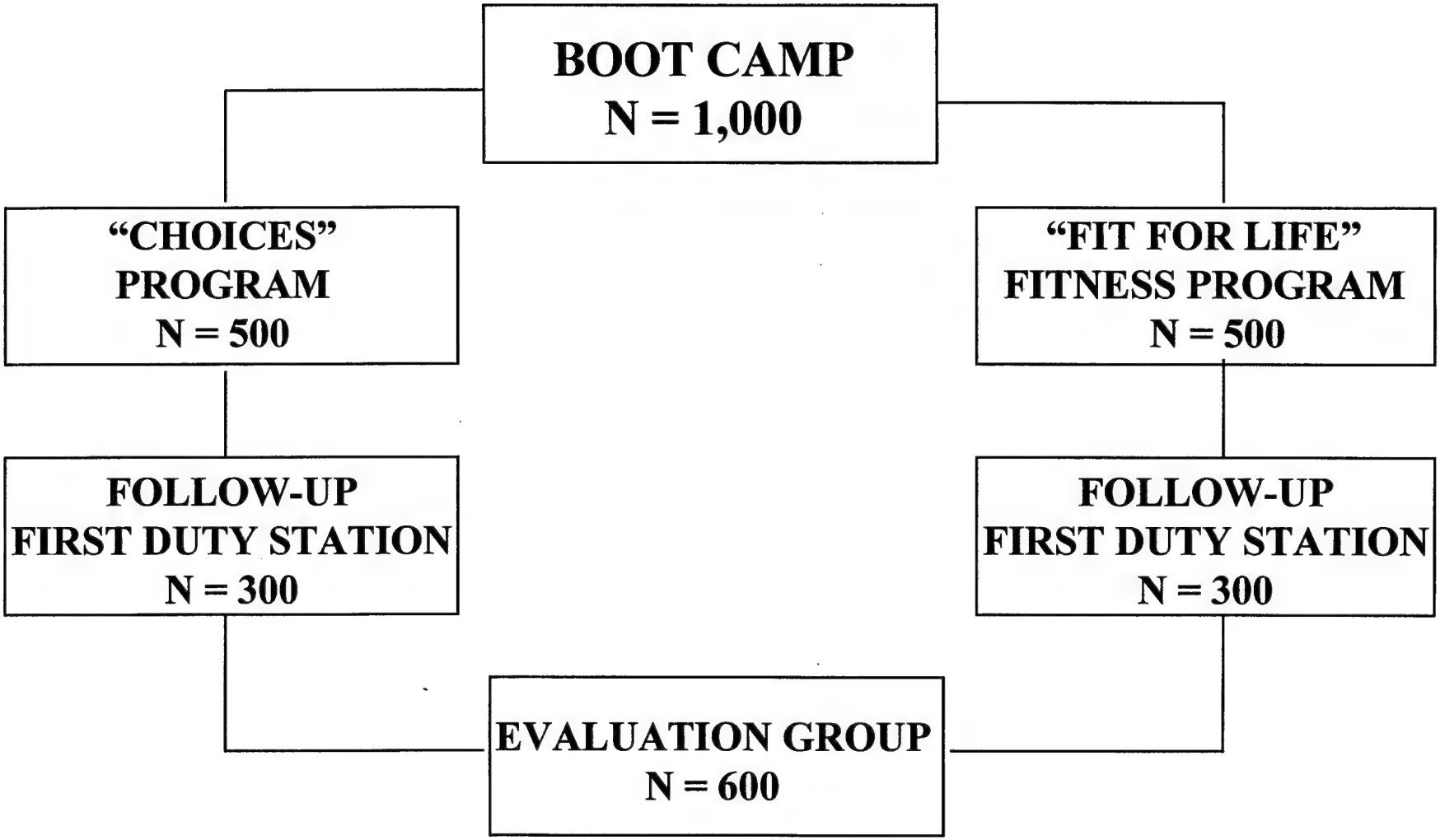
PROGRAM TIMELINE

BOOT CAMP BASELINE	MCT 5 WEEKS	FIRST DUTY STATION 6-9 MONTHS
Recruitment	--	--
Questionnaire	--	--
STD/Pregnancy Screening	STD/Pregnancy Screening	STD/Pregnancy Screening
Programs "Choices" "Fitness for Life"	--	--

"FITNESS FOR LIFE" PROGRAM GOALS

- Improve participants' performance and lifestyle through nutrition and healthier food choices
- Improve participants' fitness performance
- Reduce participants' risk of sports/physical training injuries
- Examine the link between diet and cancer risk
- Examine the risk and prevention of cervical and breast cancer

PROGRAM ENROLLMENT PLAN



APPENDIX B:

Overview and Selected Materials: "Choices"

CHOICES

Intervention to Decrease Risk for STDs and Unintended Pregnancies in Military Women

A BIOPSYCHOSOCIAL Approach

Mary-Ann Shafer, MD - Cherrie Boyer, Ph.D. - CMDR Rick Shaffer - Capt. Stephanie Brodine (Ret.)

PROGRAM *Overview*

Session 1

Introduction:	Overview of Program Overview of Session 1 Ground Rules (H-I-N-T-S Slide)
Module 1.	Values Exercise
Module 2.	Slide Set 1: Overview of Women's Risk for Unplanned Pregnancy, STDs/HIV/AIDS
Module 3.	Slide Set 2: Anatomy and Physiology Basics Video: The GYN Exam
Module 4.	Slide Set 3: Prevention
Module 5.	Life Goals Worksheet

Session 2

Introduction:	Review of Session 1 Overview of Session 2
Module 1.	Slide Set 3: Introduction to Contraception
Module 2.	Slide Set 4: Hormonal Contraceptive Methods
Module 3.	Pregnancy Test Visualization: Part 1
Module 4.	Slide Set 5: Barrier and Other Contraceptive Methods
Module 5.	Pregnancy Test Visualization: Part 2
Module 6.	Slide Set 6: Pregnancy Options and Support
Module 7.	Role Play: "Let's Talk about Sex and Contraception"

Session 3

Introduction:	Review of Session 2 Overview of Session 3
Module 1.	Slide Set 7: Disease Transmission and "Safer Sex" Strategies
Module 2.	Personal Risk Assessment Exercise
Module 3.	Risk Assessment Exercise: "Picking Mr. Right"
Module 4.	Slide Set 8: STD/HIV/AIDS Signs, Symptoms and Consequences
Module 5.	Feelings and Opinions Survey Exercise
Module 6.	Video: "Good To Go"

Session 4

Introduction:	Review of Session 3 Overview of Session 4
Module 1.	Slide Set 9: Alcohol Effects and Use
Module 2.	Alcohol Use and Sexuality Exercise
Module 3.	Condom Relay Exercise
Module 4.	Role Play: Refusal Skills
Module 5.	Health Care Access
Module 6.	Wrap-Up Exercise

INTRODUCTION: *goals & objectives of the program*

Objectives: To define the goals of the unplanned pregnancy and STD/HIV prevention program.

To define the procedures for the biological screening and the administration of the questionnaires as well as set the tone for participation in the four sessions.

To create a framework for reinforcing the concepts of personal choice and responsibility for one's own decisions.

Time: 5 minutes.

Materials: None, only a verbal discussion.

Procedure:

- The actual program will take place over the next week during which you will participate in four classes of about two hours each.
- During this time we will discuss a great deal of information, some of which you will already know, but other material will really be new.
- We hope that you will ask lots of questions and participate in all that we have planned for you. While talking about unplanned pregnancies and sexually transmitted diseases (STDs), including HIV/AIDS is serious, we also hope this program will be fun for you.

This program will probably be like nothing you've done before:

- It is about reducing your risk of an unplanned pregnancy and becoming infected with an STD, including HIV infection.
- It is about learning how to protect yourself from unplanned pregnancies and STDs.
- It is designed to provide you with the information and skills that you need to always make choices that will prevent you from ever placing yourself at risk for an unplanned pregnancy, or placing you, your spouse, or future sexual partners at risk for contracting an STD, including HIV infection.

This program is about **CHOICES**:

- Sexual behavior is a private matter. Only you know what your choices are and whether or not these choices place you at risk for unplanned pregnancy or contracting an STD. Only you know if you are being honest about what risks you are taking for yourself and others.

- These kinds of choices are not always a simple or easy matter. For example, alcohol consumption impairs one's judgment and greatly increases the risk of making unhealthy decisions about sexual activity.

- Sexual desire is very powerful. It can easily cause one to deny or ignore the risks involved with sexual activity. Also there are other reasons why people take risks, even though they have knowledge they do not always protect themselves.

- Hopefully, this program will give you a chance to talk about your choices whether or not you choose to protect yourself from unplanned pregnancy, and protect yourself and sexual partners from contracting an STD. One of these diseases, HIV infection, is life-threatening and has no known cure.

- Every time you engage in sexual activity you have to protect yourself. ***EVERY TIME!*** If you choose to make even one exception to this rule and have unsafe sex, you can risk an unplanned pregnancy or even HIV infection that can result in AIDS. The choice is yours and only yours. No one else can ***DECIDE*** or ***CHOOSE*** to protect you from getting an STD, or from becoming pregnant before you want to be pregnant. Only you can make the choice. That's what this program is about.

- Finally, this program was developed by us, specifically, for women Marines in consultation with other women Marines. We hope you learn something from the program and enjoy this learning experience.

OVERVIEW of session 1

Objectives: To reinforce information about the goals of the program and provide participants with the basic facts about unplanned pregnancy and STDs, including HIV/AIDS.

To allow participants examine how values, beliefs and attitudes impact decisions regarding sexual activity and behavior.

Time:

Format: Interactive slide presentation, and group discussion.

Materials: Slide projector, screen, writing board and markers, Ground Rules: H-I-N-T-S slide, slide sets 1-3, Goals Worksheet, VCR and monitor, Video: The GYN Exam.

Outline:

Introduction: Overview of Program
Overview of Session 1
Ground Rules (H-I-N-T-S Slide)

Module 1. Values Exercise

Module 2. Slide Set 1: Overview of Women's Risk for Unplanned Pregnancy, STDs/ HIV/AIDS.

Module 3. Slide Set 2: Anatomy and Physiology Basics
Video: The GYN Exam

Module 4. Slide Set 3: Prevention

Module 5. Life Goals Worksheet

Conclusions

OVERVIEW OF WOMEN'S RISK *for unplanned pregnancy, STDs/HIV/AIDS*

Objective: To educate participants about the risks associated with unplanned pregnancy and STDs and HIV/AIDS.

Time: 35 minutes.

Materials: Slide projector and screen, Slide Set 1
Overview of Unplanned Pregnancy
Overview of STDs
Overview of HIV/AIDS

Format: Interactive Slide Presentation.

Overview of Women's Risk for Unplanned Pregnancy, STDs/HIV/AIDS

In today's session we will begin by discussing the basics concerning unplanned pregnancy and sexually transmitted diseases, including HIV/AIDS. We will also discuss the term "risk" as it relates to unplanned pregnancy and acquiring and transmitting STDs.

The first question to ask ourselves is:

Why are women at risk for unplanned pregnancy and STDs?

Let participants respond.

Risk for Unplanned Pregnancy and STDs

SLIDE 2

- Low self-esteem
- Media influences on attitudes and behavior
- Alcohol and drug use
- Lack of information
- Lack of access to care
- Difficulty in negotiating birth control and safer-sex with partner
- Other Responses

- All of these answers are right, and are part of the common experience of many women. When we talk about risk, we are talking about behaviors that affect your health now and can lead to such things as unplanned pregnancy and many different STDs.

- Although an unplanned pregnancy can often be handled, and an STD can often be treated, there are also instances in which an unplanned pregnancy or an STD may have severe consequences.

- Let's begin by talking a little more about unplanned pregnancy. The reason it is so important to talk about unplanned pregnancy is because it is a reality for many women.

How many women do you think have unplanned pregnancies in the US?

Let participants respond.

Unplanned Pregnancy **SLIDE 3**

- Of the 58 million women age 15-44 in the US, over two-thirds are at risk for unplanned pregnancy, this means that they are sexually active and do not want to become pregnant but could if they use no contraception, or use it incorrectly.
- Each year in the US, one in nine women ages 15-44, become pregnant.
- Of these 6.4 million pregnancies, 56% were unplanned.
- Half of these unplanned pregnancies are due to improper or inconsistent contraceptive use.
- Half of the unplanned pregnancies occur in women who were using no contraception.

Results of Unplanned Pregnancies **SLIDE 4**

- 43% of unplanned pregnancies result in birth.
- 44% of unplanned pregnancies result in abortion.
- 13% of unplanned pregnancies result in miscarriages.

These decisions are very difficult ones and a very personal matter. No matter what you decide to do in this situation there are consequences of being pregnant that can not be avoided.

There are also other consequences of unplanned pregnancy **SLIDE 5**

- **Emotional-psychological** (relationship changes)
  Getting pregnant when you are not ready can be a tremendous shock, creating stress and anxiety, as well as confusion about what to do and who to turn to, especially if you are without the support of a committed partner and away from home and supportive family.
- **Interruption of service or career**
  Being pregnant may take you out of your specific MOS training field and parenting, especially if you are a single parent, may interfere with your responsibility to the Corps such as your ability to be deployed.
- **Financial**
  There are enormous financial responsibilities in being a parent, including providing food, a home, and childcare. This can be very difficult for young women who are in the early stages of their career, and therefore, have very little money.

Here we have come up with only three possible consequences for having a child that is unplanned.

ANATOMY & PHYSIOLOGY 101

Objectives: To provide participants basic facts about female and male reproductive anatomy and physiology.

Time: 20 minutes.

Materials: VCR and monitor; Video: The GYN Exam; slide projector and screen, slide set 2:

Female Anatomy
Menstrual Cycle
Male Anatomy

Format: Interactive Slide Presentation.

Anatomy and Physiology 101

We have already covered some of the basics about the consequences of unplanned pregnancies, STDs and HIV, and why it is so important to learn about and discuss these issues. Let's go back now to the question of why women are at risk in the first place and start with some basics about the female body and how it works.

Female Anatomy and Physiology Basics

First, let us identify some basic parts of a woman's reproductive system, including the organs and body parts that have to do with sex and getting pregnant.

Female Genitalia **SLIDE 28**

- This is a view of a woman's genitalia while she is lying down.
- Here (point to anus and clitoris to orient them) is the anus and here is the clitoris.
- Below the clitoris is the urethral opening and finally the vaginal opening.

Vagina and Cervix (Point to vagina, then cervix on the slide) **SLIDE 29**

- The vagina is the birth canal and is also the opening where the penis enters during vaginal intercourse. It connects the outside of a woman's genitals to the cervix, which acts like a door, connecting to the uterus.

- The vagina and cervix are covered by a lining of cells that are thin and fragile. This thin lining is susceptible to tiny (microscopic) tears, increasing the ability of STD and HIV infections to enter the body. This is why transmission of some STDs and HIV is more likely to occur from males to females than from females to males. This risk is present ***every time*** sex occurs.

- The lining covering the vagina and cervix also produces secretions, or a type of body fluids, that are always present in the vagina. One of the purposes of these secretions is to keep the vagina lubricated and healthy. These secretions or body fluids can also transmit STDs and HIV during sexual activity.

Uterus (Point to uterus on the slide)

- The uterus or womb, is the place where a normal pregnancy develops. The lining inside the uterus builds up during the course of the menstrual cycle then breaks down and sheds once a month. This is your period.

Ovaries

The ovaries produce the eggs during "ovulation" every month (around mid-cycle) and also release the female hormones estrogen and progesterone which control the menstrual cycle.

Fallopian tubes (Point to Fallopian tubes, both left and right sides)

- The Fallopian Tubes, or tubes for short, are where conception, that is, fertilization of the egg by sperm normally occurs.
- Blockages of the tubes are more likely to be the result of old pelvic inflammatory disease (PID). It is mostly due to chlamydia and gonorrhea going untreated and ascending from the cervix up to the uterus and tubes, resulting in scaring.
- If the tubes are blocked from the scars of a previous PID infection the fertilized egg can get stuck in the tube causing an ectopic pregnancy which can be life-threatening if it bursts before it is detected. This is especially worrisome if this would happen on deployment or in maneuvers away from a hospital.

Menstrual Cycle **SLIDE 30**

- On the average, a woman has a period every 28 days. During this 28-day cycle, the levels of the two female hormones estrogen and progesterone change, causing the lining of the uterus to build up to a peak around mid-cycle (usually day 14).
- If the egg is fertilized, a pregnancy can begin. If the egg is not fertilized, the lining of the uterus slowly breakdowns and sheds out of the body – this is your period. The entire cycle begins again for roughly the next 28 days.
- Remember that although the most likely time to get pregnant is around mid-cycle, this is not always predictable beforehand. Also sperm can live up to 72 hours (3 days) once inside a woman's reproductive tract. Therefore sex, even before the mid-cycle, can result in a pregnancy.

Now that we know some of the basic facts about a woman's body and how it works, lets take a few minutes to go over some of the basics about a man's body and how it works because it's important for a woman to know as much as she can in making healthy decisions.

Male Anatomy and Physiology **SLIDE 31**

Let's go over some of the basics about a man's reproductive health system (also the system that has to do with having sex and getting pregnant).

Penis and Urethra (Point to penis and urethra on slide)

- The penis is the sexual organ of a man. It becomes erect (hard) when a man gets sexually excited.
- The urethra is the tube that runs through the penis to the outside of the man's body. Urine is carried through the urethra as well as the semen that contains sperm during sexual intercourse.
- The sperm and urine do not mix because of tiny valves that block off the passage of urine during sexual activity. Semen is a body fluid, and exposure to semen can transmit STDs and HIV.

- It is also important to know that during sexual arousal in a man, some fluid comes out of the penis before a man ejaculates or "comes", this pre-cum can contain sperm. Because of this, "pulling out" or withdrawal of the penis before a man "comes" does not effectively prevent pregnancy or the transmission of HIV and STDs.

Testicles

- The testicles or balls are where sperm are produced.

Now that we have reviewed some basic facts about female and male anatomy, and the risk of unplanned pregnancy and getting STDs, including HIV, we will discuss prevention.

VIDEO - *the gynecological examination*

Objectives: To familiarize participants with the basics of a gynecological exam and review the female reproductive anatomy.

To reinforce the importance of having an annual GYN exam.

Time: 20 minutes.

Format: Video presentation and discussion

Materials: VCR and monitor, extension cord

Procedure: Facilitator will show the video and conduct a 5-10 minute review and discussion of the video.

Discussion: Review the following points:

- Allow participants to ask questions about the GYN exam.
- Encourage participants to use their health care provider as a valuable resource to discuss their questions and concerns.
- Emphasize the importance of an annual GYN exam, including a Pap Smear, and STD testing whenever necessary.

PREVENTION

Objectives: To introduce to participants the concept of prevention.

Time: 5 minutes.

Materials: Slide projector and screen and Slide Set 3: Prevention.

Format: Interactive Slide Presentation.

PREVENTION

We have covered a great deal of information on the risks and problems that are associated with unplanned pregnancy and STDs and HIV/AIDS. Now, let us talk about how we can avoid them altogether.

PREVENTION **SLIDE 32**

Unplanned pregnancies and STDs are 100% preventable. Either through abstinence or taking precautions. Both of these choices require planning ahead. In order to plan ahead we need:

- **Information**
  Information is needed to assess a situation and to make healthy decisions.
- **Intention**
  Having a set life plan in mind with your goals related to having/or not having children and staying healthy and free of infections or disease.
- **Skills**
  Having the skills or ability to follow-up with your decisions about either abstinence and/or choosing when to have a baby and preventing disease.
- **Access**
  Having the access to resources needed to support your decisions as well as the support to stick to your decisions.

We will cover more of these issues throughout the rest of the program.

LIFE goals

Objective: To assist participants in the development and articulation of their goals related to their careers in the Marine Corps.

To provide participants with information that will assist them in their decision about if and when they choose to become parents.

Time: 15 minutes.

Materials: Life Goals Worksheet

Format: Group discussion.

Procedure:

- Instruct participants to briefly fill out the Life Goals Worksheet.
- Ask participants to share their goals with the group:
- How does your future goals influence your decisions about your sexual practices?
- Would an unplanned pregnancy disrupt your goals? How?
- Regardless of your personal goals, it is important to maintain control over your decision to choose if and when you want to be a parent.
- As Marines in-training, you do not have control over many things, but the one important thing you do have control over is your decision about whether or not you choose to protect yourself from an unplanned pregnancy or an STD.

LIFE GOALS *worksheet*

Please answer the following questions briefly, but honestly. Only you will see your answers.

1. What are your personal and professional goals over the next two years?

2. What are your personal and professional goals over the next five years?

3. Some women plan to have children and others do not. If you plan to have children, when do you think you would like to have children? ***OR*** How would you like to space your pregnancies?

CONCLUSION- *session 1*

- We have covered quite a bit of information during this session. We discussed some basic facts about the risks of unplanned pregnancy, STDs, HIV and AIDS as well as basic information on the reproductive systems of both females and males.
- As part of this discussion we talked about how society's values, beliefs and attitudes about women shape our own perceptions and behaviors. Moreover, we discussed the importance of having future goals.
- In our next session we will focus on basic factual information about various types of birth control. We will also practice communication skills for talking with a sexual partner about sex and use of contraception.
- I want to sincerely thank you for your participation in this session.
- The next session in the program will be: (state the exact, day, date, and time, and place of the next session).

OVERVIEW: session 2

Objectives: To provide participants with an overview of the basic facts about current contraceptive methods.

To develop communication skills related to sexual activity and use of contraception.

Time:

Format: Interactive slide presentation, group discussion, and role play

Materials: Slide projector, screen, writing board and markers, individually wrapped candy of two distinct types (enough for each participant to get one piece of either type), handout: "Let's Talk About Sex and Contraception."

Outline:

Introduction:	Review of Session 1 Overview of Session 2
Module 1.	Slide Set 3: Introduction to Contraception
Module 2.	Slide Set 4: Hormonal Contraceptive Methods
Module 3.	Pregnancy Test Visualization: Part 1
Module 4.	Slide Set 5: Barrier and Other Contraceptive Methods
Module 5.	Pregnancy Test Visualization: Part 2
Module 6.	Slide Set 6: Pregnancy Options and Social Support
Module 7.	Role Play: "Let's Talk About Sex and Contraception"
Conclusions	

REVIEW: session 1

Briefly remind participants of what took place during Session 1 and briefly give an overview of Session 2.

Review of Session 1:

During Session 1 we:

- Reviewed personal values, beliefs and attitudes and their relationship to sexual decision making and risk.
- Reviewed consequences of unplanned pregnancy.
- Defined STDs, HIV, and AIDS.
- Reviewed basic facts about the female and male anatomy and physiology.
- Discussed the importance of prevention of unplanned pregnancy and STDs and HIV.
- Reviewed life goals and how they can impact decisions about sexual behavior.

Overview of Session 2

In today's session we will:

- Discuss historical facts about contraception.
- Review of current contraceptive methods.
- Explore and discuss attitudes and beliefs about unplanned pregnancy.
- Practice communication skills related to sex and use of contraception.

OVERVIEW: *methods of contraception*

Objective: To provide participants with a historical overview of contraceptive methods.

To provide participants with factual information about available methods of contraception.

Time: 5 minutes.

Materials: Slide projector and screen, Slide Set 3.

Format: Interactive slide presentation.

Overview Of Methods Of Contraception

Let's begin our discussion of contraception by looking at the history of women wanting to prevent pregnancy until a time of their choosing. As we will see, we have come a long way.

History of Contraception (title slide) **SLIDE 33**

To begin with women have devised means of contraception since they became aware of the relationship between sexual intercourse and pregnancy.

Methods of Contraception **SLIDE 34**

- Abstinence
- Spermicidal methods and withdrawal were noted in the Bible and other ancient literature.
- Egyptians used methods such as douching with wine and garlic, or used sponges of camel dung and sour milk.
- Japanese women used balls of bamboo paper.
- Islamic women used willow leaves.
- Pacific Island women used seaweed.

Methods of Contraception **SLIDE 35**

- Early references to condoms were found in Europe. In 1564 linen sheaths were used to prevent syphilis.
- Condoms were made of animal gut in the 1700's.
- The diaphragm and cervical cap were introduced in the 1800's.
- The Goodyear Company who makes rubber tires used rubber to make condoms in 1843.

Obviously, many of these old methods were not effective. As we can see there has been a continuing evolution of methods used by women to plan their pregnancies. Many of our current methods, particularly methods such as the condom, diaphragm, and spermicides have their roots in history. The only truly new current contraceptive methods are those that involve the use of hormones that have developed over the last 30 years.

So let's now review what women are using for contraception today.

Current Contraceptive Use **SLIDE 36**

- 35 million women between ages 15-44 years use some form of contraception. This reflects 6 out of 10 women in the U.S.
- Of those women who practice birth control:
    - 29% use oral contraception
    - 18% use condoms
    - 5% use other methods such as Depo-Provera® and Norplant®
    - 3% use diaphragms
    - 3% use periodic abstinence (no sex)
    - 1% use IUDs (the intrauterine device)

SLIDE 37

- 42% of women using contraception (14 million) rely on sterilization. Although it is ***not*** reversible, it is the most popular method for women who are married and who have completed their family.
    - 10 million women have had sterilization surgery themselves.
    - 4 million rely on their partner's vasectomy.

? What are the things to consider when deciding on a method of contraception to use?

Let participants respond.

Contraception Considerations **SLIDE 38**

Selecting a contraceptive method involves assessing many factors:

Availability

- Most methods of contraception are available in most places. There may be some variability in what is available depending on where you are stationed.

Effectiveness

- Women also base their decisions on how well a particular method protects them from an unplanned pregnancy.

Protection Against STDs

- Many women consider protection against STDs as an important factor in deciding what contraceptive method to use. In reality, most contraceptive methods do not offer protection against STDs with the exception of condoms.

Ease of Use

- An easy to use method is an important consideration for some women. How much planning ahead is needed? Will it interfere with sex?

Safety

- Many women make decisions about contraception based on health concerns and risks and worry about side effects. In healthy young women most contraception methods are generally safe and without risk to their health.

Cost

- Although the cost of contraceptive methods may vary in civilian facilities, in the military, most methods are covered as part of your benefits.

Reversibility

- How soon can a woman get pregnant after stopping the use of a particular method is dependent upon the method. For example, if a woman chooses to be sterilized, the decision should be considered permanent. However, if a woman chooses birth control pills, she can expect to get pregnant three to six months after stopping the pills.

Values and Beliefs

- For some women, their religious and moral convictions play an important role in deciding if they want to use contraception as well as what kind of method that is acceptable.

Control over Use

- Can the responsibility for using contraception be shared with a sexual partner, or would I feel more comfortable or in control if I choose a method that I use myself?

- For example, a woman can have more control (OCPs) or less control (condoms) over use depending on method she chooses.

The bottom line is that choice of contraception is a personal matter. No matter what reasons are important to you in choosing a method of contraception, it is important to consider and think through all of these issues for yourself. Planning ahead is an essential element for being successful in preventing an unplanned pregnancy. Your health care provider (the gynecology clinic at the base hospital or clinic) is a resource and source of support for you in choosing a contraceptive method that is right for you.

HORMONAL *contraceptive methods*

Objectives: To provide participants with basic information about hormonal methods of contraception.

Time: 25 minutes.

Materials: Slide projector and screen, Slide Set 4; birth control facts handout.

Format: Interactive slide presentation.

Hormonal Contraceptive Methods

Let's now briefly discuss the methods of contraception available to women. First, we will cover the methods of contraception that use female hormones.

Oral Contraceptives or Birth Control Pills SLIDE 39

What are they? How do They Work?

- Pills taken daily.
- They inhibit ovulation (prevents egg from being released from ovary).

How Effective are They?

- 99% effective if taken correctly (same time) and consistently (daily).

Strong Points

- Does not interfere with sex.
- Less bleeding, cramps, acne, and iron deficiency anemia.
- Protection against ovarian and endometrial cancer.
- Women control use.

Weak Points and Potential Health Concerns SLIDE 40

- No protection against getting STDs and HIV.
- Must remember to take daily.
- May not be a good method for women age 35 and older who smoke.
- May have minor side effects of moodiness, breast tenderness, spotting, vaginal yeast infections in some women.
- Very small chance of high blood pressure, blood clots, heart attacks and strokes
- No proven risk of breast cancer.

Photo of Oral Contraceptive of Birth Control Pill Packs SLIDE 41

- 2 examples of different types of pills

Many of the fears about birth control pills are based on information from using older forms of high dose hormone pills. Today's low dose pills are a very safe method for healthy young women. With the use of today's low dose oral contraceptives, there has been no difference in weight between users and nonusers. In fact, weight gain is really due to diet, exercise and aging. Most other side effects can be controlled by switching to a different type of pill.

Depo-Provera® **SLIDE 42**

What is it? How does it Work?

- Female hormones injected every three months (progesterone).
- Prevents ovulation.

How Effective is it?

- More then 99% effective.

Strong Points

- Lasts three months.
- Does not interfere with sex.
- Often decreases bleeding and cramping associated with periods.
- Sometimes leads to no periods after about six to nine months, which is safe for your body.
- Can be used while nursing.

Weak Points and Potential Health Concerns **SLIDE 43**

- No protection against STDs or HIV.
- May cause heavy periods, irregular periods or irregular spotting.
- May not be able to get pregnant for several months after shots are discontinued.
- May cause minor side effects of moodiness, headaches or dizziness.
- Some women may gain weight, but this can be controlled with diet and exercise.
- Should not be used by women with liver or heart disease, breast cancer, blood clots.

Injectable Contraceptives: Depo-Provera **SLIDE 44**

- Photo of injectable contraceptive

Another hormonal method of contraception is Norplant®

Norplant® **SLIDE 45**

What is it? How Does it Work?

- Six tiny capsules of female hormone inserted under skin of inner side of upper arm.
- Prevents ovulation.

How Effective is it?

- 99% effective.

Strong Points

- Lasts for five years.
- Always in place.
- Does not interfere with sex.
- Can be removed anytime, then women can become pregnant within a few months.

Weak Points and Potential Health Concerns **SLIDE 46**

- No protection against STDs and HIV.
- Minor surgery required to insert and remove capsules.
- Many women experience irregular periods bleeding in first year of use, this may decrease over time and lead to light periods or no periods at all.
- Initial cost is high ($400-$650).
- Should not be used by women with liver or heart disease, breast cancer or blood clots.

Norplant ® Plastic Tubes **SLIDE 47**

- 6 plastic tubes with contraceptive hormones which are placed under the skin.

With both Depo-Provera® and Norplant® many women have continued irregular bleeding or spotting for months. Although this may decrease over time, these particular methods may be problematic for women Marines for this reason, especially when you are in the field.

However, the bleeding with Depo-Provera® can be controlled by adding a cycle or two of birth control pills. It is very important to discuss your concerns with your health care provider.

We realize that we have covered a tremendous amount of information, so we will 'shift gears' for a few minutes to imagine an experience about pregnancy.

Let's now briefly review pregnancy testing.

OVERVIEW: session 3

Objectives: To provide participants with information about the signs, symptoms and consequences of STDs/HIV/AIDS.

To provide participants with information regarding the transmission and prevention of STDs/HIV/AIDS.

To provide participants with skills in communicating with potential sexual partners.

Time:

Materials: Slide projector and screen, slide sets, writing board and markers, "Personal Risk Assessment" and "Scoring Guide" handouts.

Format: Interactive Slide Presentation and Group Discussion.

Outline:

Introduction:	Review of Session 2 Overview of Session 3
Module 1.	Slide Set 7: Disease Transmission and "Safer Sex" Strategies
Module 2.	Personal Risk Assessment Exercise
Module 3.	"Picking Mr. Right" Exercise
Module 4.	Slide Set 8: STD/HIV/AIDS Signs, Symptoms & Consequences
Module 5	Feelings and Opinions Survey Exercise
Module 6.	Video: "Good To Go"
Conclusion	

REVIEW: session 2

Briefly remind participants of what took place during Session 2 and briefly give an overview of Session 3.

Review of Session 2:

During Session 2 we:

- Reviewed the history of various methods of contraception.
- Reviewed current methods of contraception.
- Discussed feelings about unplanned pregnancy and the importance of seeking social support.
- Practiced communicating with a potential sexual partner about sex and use of contraception.

Overview of Session 3

In today's session we will:

- Discuss the transmission of STDs and HIV.
- Discuss differences among "safe" "safer", and "unsafe" sex.
- Discuss how to evaluate personal risk and risk in others.
- Discuss signs, symptoms and consequences of STDs/HIV/AIDS for women

DISEASE TRANSMISSION
& "safer sex" strategies

Objective: To provide participants with information about the transmission of STDs and HIV.

Inform participants about the risks associated with various sexual practices.

Discuss the differences among "safe", "safer", and "unsafe" sex.

Time: 10 minutes.

Materials: Slide projector and screen, Slide Set 7; "STD Facts" handouts.

Format: Interactive slide presentation.

Disease Transmission And "Safer Sex" Strategies

Let's begin our discussion of STDs and HIV with how these infections are acquired. First, we are going to review some terms so that we can all understand what is being discussed.

STD Transmission Terms

SLIDE 75

Disease Transmission

- Passing a disease from one infected person to another person.

Perinatal Transmission

- Passing a disease from a mother to a baby before, during or immediately after birth.
- To break the term down further "peri" means around and "natal" means birth, so around the time of birth a mother can pass a disease on to her baby during the delivery or right after birth through breast feeding or through other bodily fluids.

Sexual Abstinence

- Not having sex.

Intravenous or "IV" Drug Use

- Drugs that are injected into the veins (directly into in the blood system) or into any part of the skin.

Carrier

- A person who has an infection without any symptoms for a long period of time. This person can still pass the infection on to another person.
- Since we will be discussing sexual behavior during our discussion about STDs, we will go over terms related to sex to make sure we are starting from the same place.

Sexual Activity **SLIDE 76**

Vaginal Sex

- A man's penis in a woman's vagina.

Oral Sex or "Going Down on Someone"

- A person's mouth on a penis or vagina.

Anal Sex

- A penis into another person's rectum/anus/butt.

We can also describe sexual activity in terms of its safety, or in other words, how risky a particular sexual behavior is.

Safe, Safer, Unsafe Sex **SLIDE 77**

- Safe, Safer, and Unsafe Sex refer to sexual practices of varying levels of risk that can potentially transmit STDs and HIV through the exchange of body fluids.
- When thinking about whether a sexual activity is "safe", always ask yourself this question, "Is there some way semen, blood or other body fluids can get onto my skin or in my blood system?".

SAFE SEX: No STD Risk **SLIDE 78**

- "Safe Sex" activities include those that have ***no*** risk of exchanging body fluids such as blood, semen, or vaginal secretions. It is sometimes referred to as "outercourse." Some "safe sex" activities include:
    - Hugging
    - Body massage
    - Masturbation alone or with a partner
    - "Outercourse," grinding fully clothed
    - Taking a shower or bath together without genital contact
    - Dancing

SAFER SEX: Some STD Risk **SLIDE 79**

- "Safer Sex" activities include sex with the ***possibility*** of exchanging body fluids such as blood, semen, or vaginal secretions. Human error is always a possibility when engaging in sexual activity. Some "safer sex" activities include:

    - Oral sex with a latex barrier (condom or dental dam)
    - Genital touching with hands; some people use latex gloves unless hands and genitals are completely free of any cuts, scratches or sores (some may be unseen)
    - Vaginal intercourse with a condom
    - Anal intercourse with a condom (the rectum has a much smaller opening than the vagina and can be injured easily because the skin inside is so very thin)

UNSAFE SEX: High STD Risk **SLIDE 80**

- "Unsafe Sex" includes vaginal, oral or anal intercourse, without a barrier such as a condom or a dental dam. It is any sexual activity that allows blood, semen, or other body fluids to enter the blood or get on the skin of another person.

- Some STDs can be transmitted through kissing, for example syphilis and oral and genital herpes can be transmitted by exposure to open sores on the genitals or in the mouth including the lips or tongue.

- HIV is a bit different because it can not be transmitted through "dry kissing" with no exchange of saliva. The mouth is very delicate and gums can bleed or have tiny cuts from brushing your teeth which may cause exposure to blood, and HIV if it is present in the blood. We don't know for sure whether "wet kissing" (also called deep kissing or 'French kissing") transmits HIV. So far there are no known cases of HIV from "wet kissing".
-

? How STDs/HIV are Transmitted?

Let participants respond.

STDS/HIV are transmitted by: **SLIDE 81**

- **Unsafe Sexual Behavior**

  Sex **without** a condom (or other latex barriers such as a dental dam) with a person infected with STDs/HIV can transmit the infection by passing body fluids from one person to another. A condom or dental blocks the transfer of these fluids.

- **Sharing Unsterile or Used Needles**

  A used needle may have infected blood on it, so someone who shares needles is in danger of putting infected blood right into his or her own bloodstream. This can happen when an unsterile needle is used for injecting drugs, steroids or vitamins, or for piercing of the ears or other body parts, or for tattooing. Simply boiling needles does not kill many of these infections. It is necessary to first wash the needles in liquid bleach and then use water to rinse the needles.

- **Perinatal Exposure**

  A mother with HIV or some other STD can pass the infection to her baby through body fluids around the time of birth (as we previously discussed).

? How are STDs/HIV <u>not</u> transmitted?

STDs including or HIV can ***not*** be transmitted from any of the following: **SLIDE 82**

- forks, knives, spoons, glasses
- door knobs, telephones, pencils
- donating or giving blood
- insect bites such as mosquitoes
- through the air
- touching, shaking hands, or hugging
- being sneezed or coughed on
- beds, gym equipment
- showers, tubs, pools, toilet seats

Sexual Transmission **SLIDE 83**

This story takes place four months from now while you are at Service School. Imagine, just for a moment, that you are the young woman in the following situation.

Read the following scenario:

Imagine that you're at a club. You're out with some friends from your school. It was a difficult week and you and your friends just want to relax and have a good time. You miss your family back at home, and you are beginning to feel a little lonely. You're sitting there talking when a group of guys (who are also Marines) come into the club. You and your friends start talking to them and before you know it you are all coupled off. You start talking and dancing with one of the guys. He is very out-going and has a great sense of humor. As you continue talking with him he tells you that he broke up with his girlfriend a month ago and that he is looking for a relationship with that "special" someone. You immediately feel comfortable with him so you decide to leave the club with him and go to his apartment. After talking for a while more you are impressed with how sensitive and respectful he seems to be and how he takes his military career seriously. You begin to kiss and hold each other, and you both decide to have sex. You are taking birth control pills, but because you were not planning on this happening neither of you have condoms. You think to yourself "just this one time, nothing bad could happen, besides he said he was monogamous with his previous girlfriend, he couldn't possibly have anything". So you have sex without using a condom. As you lay in bed you think what a romantic evening it has been...just the two of you. **SLIDE 84**

Let's imagine for a second that your new friend has made the same exception and had unprotected sex "just one time" at least twice before. **SLIDE 85**

What your new friend didn't know was that the first woman he "picked up" from the club just after his break up with his girlfriend had sex with a total stranger..."just once". He didn't know that on another occasion she had made an exception ..."just one time"...she had unprotected sex with someone she had been dating for only two weeks. He didn't know that the other woman he had unprotected sex with had made an exception..."just one time"...with at least two different partners. **SLIDE 86**

Each of these people had also put themselves at risk "just this one time" at least twice before. **SLIDE 87**

And imagine if their sexual partners made exceptions and had unprotected sex "just this one time" at least twice before.

Now, let's think about who is in bed with you during your romantic evening... there are at least thirty people in bed with you and your new friend and any one of them could be infected with an STD. The thing of it is, you don't know which one. It could be anyone...

Now let's take a look at your sexual history. **SLIDE 88**

Before, you thought it was just you and your new friend having a romantic evening, in fact there are at least sixty people in bed with you!

Now that we have discussed how STDs and HIV are transmitted, and how they are not transmitted let's talk about prevention. An important aspect of prevention is being able to evaluate your risk and the risk of your potential sexual partners.

PERSONAL RISK ASSESSMENT *exercise*

Objective: To allow participants to access their own risk for acquiring an STD, including HIV.

Time: 10 minutes.

Materials: "Personal Risk Assessment" and "Scoring Guide" handouts

Procedure: Instruct participants that this will be a two part exercise in which they will have the opportunity to examine their own risk for getting an STD/HIV.

Instructions for Handout 1:

Tell the participants that the following questions are about their previous behaviors and activities. Remind them that there are no right or wrong answers to these questions. Since only they will see their responses, it is important that they answer each question as honestly as possible.

After they have answered the questions, they can obtain their risk score by adding one point for each ***"yes"*** answer.

Allow about 5 minutes

Instructions for Handout 2:

Tell participants to take a look at the Scoring Guide to determine their risk for getting an STD.

When everyone has had a chance to find their score individually go over the scoring out loud. Ask participants for comments or questions. Remind them that they each get to control how much they choose to disclose to the group.

PERSONAL RISK ASSESSMENT

The following questions are about your previous behaviors and activities. Please keep in mind that there are no right or wrong answers to these questions. Only you will see your answers, so it is important that you answer each question as honestly as you can.

Circle YES or NO for each question.

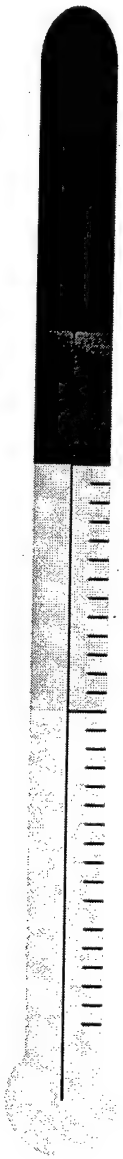
1.	Have you ever been told by a doctor, nurse, or corpsman that you have a sexually transmitted disease, also known as STDs?	**YES NO**
2.	Have you ever had a pregnancy that you did not plan?	**YES NO**
3.	Did you have more than one sexual partner in the last year?	**YES NO**
4.	Have you ever engaged in oral sex (your mouth on a man's genitals) without a condom?	**YES NO**
5.	Have you ever engaged in vaginal sex (a man's penis in your vagina) without a condom?	**YES NO**
6.	Have you ever engaged in anal sex (a man's penis in your anus, rectum or butt) without a condom?	**YES NO**
7.	Have you ever had sex just after drinking alcohol?	**YES NO**

To obtain your score, add one point for each "YES" response.

YOUR SCORE IS _____

SCORING guide

Based on your answers to the questions on the previous page, you can determine your level of risk for getting an STD, including HIV in the future by using the risk thermometer below.



VERY HIGH RISK	Score of 7
HIGH RISK	Score from 2-6
MODERATE RISK	Score of 1
LOW RISK	Score of 0, 1 sexual partner and use condoms during each sexual encounter (or other barriers for oral sex)
NO RISK	Score of 0, you are currently abstinent or you are in a mutually monogamous relationship and you and your partner have been screened for STDs/HIV, or you only engage in "safe sex" (outercourse).

Discussion Points:

- Abstinence, "safe sex" (outercourse), or being in a current mutually monogamous relationship where both partners are free of infections are the only ways to prevent getting an STD.
- Current screening tests and examination for STDs are not 100% effective for the herpes virus (HSV) or the virus that causes genital warts (HPV). This means that even if you are in a mutually monogamous relationship and both partners have been screened for STDs, and if you or your partner have previously been infected with HSV or HPV there is still a chance that the infection could be transmitted between you and your partner.
- Using condoms is not 100% safe, but condoms offer the best protection available.
- Future risk for getting an STD has been shown to be strongly related to your past history of risky activity and behavior.
- With awareness of risk, you can make the choice to change your future risk for getting an STD by making healthy decisions about protecting yourself when you have sex.
- Alcohol use can promote risky sexual behaviors by affecting your ability to think reasonably, thereby increasing your risk for being infected with an STD or HIV.

RISK ASSESSMENT EXERCISE: *"picking mr. right"*

Objective: To increase participant's awareness of how assumptions about a potential sexual partner can influence their perceptions of their sexual risk.

Time: 15 minutes.

Materials: Writing board and markers, paper and pencils for participants.

Procedure: Tell participants that you will be telling a story about the development of a relationship and will ask them to write their answers to some questions about the story.

Format: Scenario and group discussion.

Risk Assessment Exercise: "Picking Mr. Right"

Read the following scenario:

You are at a party at your friend's house. Your friend introduces you to his friend, Robert, who he has known for a few years. Robert is tall and extremely good looking. You are immediately attracted to him. You find out in your initial conversation with Robert that he is not in the military and has a job as an engineer. He has a nice car, and even owns his own home. He has never been married, although he was engaged at one time. You really like him and can "just tell" that he seems to like you also. You spend a fair amount of time with him at the party. He is also a great dancer. He asks you out and you say yes.

?
- What are your assumptions about Robert?
- Is he a good candidate for a relationship? Why?

Before your first date with Robert you are talking about him with another friend of yours. She tells you that she has heard that he has dated quite a few other women in the last year, but he really knows how to treat them well. He takes them to nice restaurants, gives them flowers, and he even has taken one woman to the Caribbean for a get-away weekend.

?
- What are your assumptions now?
- Is he still a good candidate for a relationship? Why?

Robert comes to pick you up for your date, he even has flowers for you – no guy has ever given you flowers before. He takes you to a really nice restaurant. As the evening progresses, you are really having a good time – Robert is so easy to talk with! He has a good sense of humor, smart, and self-confident, but not arrogant. He seems like a sensitive guy. But you notice that throughout dinner he is drinking a great deal. During the evening he had a mixed drink before dinner, and four glasses of wine with dinner.

?
- What are you thinking now?

You decide to go out with Robert again. The two of you go to his friend's house for a Bar-B-Q. You notice that he seems to be flirting with another woman. You decide not to take it too seriously, after all, you have only gone out with him once before and he seems to have a lot going for himself. You leave the Bar-B-Q and go back to his house. You are very impressed, he is a total gentleman. You talk for a while, as the evening progresses you begin to make-out. He even asks you if you want to have sex. You agree. You ask him if he has condoms. He says no, but you tell him that you have some with you in your purse and would really like him to use one. To your surprise he gets a little defensive. As you try to talk to him further he gets hostile and refuses to use a condom saying that he never uses them and that you should "just trust him". You are really shocked at how upset he is. You become a little nervous and have lost interest in having sex. You tell him you've changed your mind, you get dressed and he takes you home.

?
- What do you think of Robert now?

Ask participants to share their written responses to each of the questions. Write a few responses to each question on the board.

- Were there any clues about Robert that might suggest he is at risk for STD transmission?
  - History of multiple sexual partners
  - Heavy alcohol use

? What do you think the point or message of this exercise is?

Let participants respond and write their responses on the board.

IMPORTANT POINTS TO GO OVER IN DISCUSSION:

- No matter how much you like someone, and how many things on the surface appears to look good, it takes time to really get to know someone.
- Being in a relationship is very important to many of us, and there is often a lot of internal pressure, and pressure from family, friends, and society in general to be in a relationship. However, it is important to pay attention to warning signs, be smart, and follow your "gut" instincts. It is important to be able to separate your feelings and hopes in a relationship from things you know, that might put your health at risk.
- Not only planning ahead, but thinking ahead about what you want in a relationship. Know where you may be willing to compromise, and when compromising is not acceptable to you.
- Of course the best way to make certain that you will never get an STD, including HIV, is by making decisions about how you will behave to protect yourself, and by planning ahead.

Ask participants to name some of things that they can do to keep safe from getting STDs/HIV: Let participants respond.

Ask them to state the differences between "safe," "safer," and "unsafe sex."

STD/HIV/AIDS:
signs, symptoms & consequences

Objective: To provide participants with information about the signs, symptoms and consequences of STDs/HIV/AIDS in women.

Time: 30 minutes.

Materials: Slide projector and screen.

Format: Interactive slide presentation.

STD/HIV/AIDS Signs, Symptoms and Consequences

As we discuss STDs and HIV/AIDS in more detail today we will be using very frank language and some pretty graphic pictures of STDs. It may seem very scary or even depressing. So to begin this discussion, I want to state again, that STDs, including HIV and AIDS are 100% preventable. Let's review briefly how to prevent STDs and HIV/AIDS.

? How are STDs and HIV Prevented? **SLIDE 89**

STDs/HIV are prevented by:

- Abstinence.
- Having "safe" sex
- Having a mutually monogamous sexual relationship where both partners agree to have sex with only each other.
- Having an honest discussion with your partner about past sexual relationships.
- Having appropriate tests or examinations, if needed to detect infections without current symptoms.
- Not using IV drugs or unsterile needles for anything, including body piercing and tattooing.

Now let's talk about what can happen when you decide to have sex.

Some Things That Might Happen When Sex Occurs **SLIDE 90**

- You can be OK, nothing "bad" happens. This outcome is possible if you had "safe" or "safer" sex and used a condom. Or maybe you didn't use a condom and were just ***very*** lucky.
- You could get pregnant.
- You could get an STD infection. If this happens, sometimes you can tell, because you have symptoms. But often you get an STD infection, or HIV, and you can't tell because it's a silent infection and you do not develop symptoms. If you have an STD infection but you do not have symptoms, the infection can still cause problems.

STD Infections Without Symptoms **SLIDE 91**

- The infection can be passed on to other partners or you can develop symptoms or complications at a later date.

STD Symptoms in Women **SLIDE 92**

STD symptoms for women can be grouped into syndromes (clusters of symptoms). Remember many women have no symptoms.

Rashes and Sores

- Women with particular STDs such as syphilis, herpes, or HPV may have a rash, blisters, ulcers, sores, or lumps around the vagina, anus, mouth, and other skin areas.

Urethritis

- Some STDs can cause an infection in the urethra (tube that connects the bladder to the outside of the body). Some common symptoms of urethritis include sensations or feelings of burning pain and having to pee a lot.

Vaginitis

- An infection of the vagina can cause itching or a sensation of irritation and a discharge (fluid coming from vagina) that may be different in amount, color and odor from what is normal for you.
- Some vaginal discharge is normal, in fact most women have discharge that can change during their menstrual cycle. Vaginal discharge that is more than usual, foul smelling, or associated with irritation or itching may be a sign of infection.

Cervicitis

- An infection of the cervix may appear as a discharge from the vagina or bleeding after sexual intercourse.

PID (Pelvic Inflammatory Disease) **SLIDE 93**

- PID is an infection of the uterus, ovaries and the tubes.
- Women with PID may have lower belly pain, and pain having sex.
- Women can also have any of the symptoms we just discussed including vaginitis, urethritis, and cervicitis.
- PID can also cause a "flu"-like illness with fever, diarrhea, vomiting and fatigue.

Long-Term Problems of STDs in Women **SLIDE 94**

The first group of long-term problems we will discuss are related to PID:

Ectopic Pregnancy

- This is a type of pregnancy that occurs outside the uterus, usually in the tubes. A pregnancy like this in the tubes can lead to death very suddenly if it is not detected early.

Infertility

- If a woman has scaring or blockage in the tubes from previous episodes of PID, she may become sterile which means she will not be able to have babies.

Chronic Pain

- Chronic pain can occur internally (especially during sex) in the lower belly and pelvic area due to scars which formed during a previous STD infections.

Cancer

- Cancer of the cervix can develop over time after being infected with the human papilloma virus (HPV).

Long-Term Problems of STDs for Babies **SLIDE 95**

While most men and women develop some long-term serious problems from STDs, babies infected with STDs experience ***the most serious*** problems. What is bad for men and women is truly horrible for infants.

- Babies can become so sick with STDs that they can die before they are born or soon after birth.
- STDs can cause a baby to be born prematurely.
- STD can cause serious eye damage resulting in blindness.
- STD can also harm the brain causing retardation.
- STDs can affect all parts of a baby's body and can cause physical deformities such as bone and skull problems.

Remember, sometimes the parents didn't know they had an STD and they transmitted it to their unborn baby.

All these long-term problems from STDs can be prevented by making safe and healthy decisions about your sexual practices and seeking regular medical care.

STD Symptoms in Men **SLIDE 96**

It is also important to recognize STD symptoms in men. Remember that many men may not have symptoms with an STD while the infection can still be easily passed on to another person.

- A rash, blisters, or sores anywhere on the skin of the genitals or groin area.
- Itching around the genitals
- A discharge or "drip" from the penis, sometimes with a crusting or mucus like liquid or green pus at the tip of the penis that may be most noticeable first thing in the morning.
- Burning or pain with urination is the most common STD symptom for men.

STD Problems in Men **SLIDE 97**

Urethritis

- An infection of the urethra which is the tube that carries urine and semen through the penis to the outside of the man's body.

Epididymitis

- A painful infection in the testicles.

Proctitis

- An infection in the anus.

Recommendations:

- Any sign or symptom that could be related to any STD, is a message for you to see your health care provider immediately.
- Prompt evaluation and treatment of STDs can prevent them from getting worse or spreading. It is also very important to be examined and tested for other STDs that may not have symptoms at the present time.
- If you have been exposed and infected an STD, your risk is greater for being exposed to and getting another STD.
- Remember that we can always prevent STDs, but we can not always cure them.

Types of STDs and Treatment **SLIDE 98**

Treatment outcomes are different and depends on the type of infection.

- Common infections caused by bacteria and other bugs include; gonorrhea, chlamydia, and syphilis. Right now these infections can be treated and cured. Many antibiotic treatments for STDs now require only one dose of medicine. However, in a few years this may no longer be true as more and more types of gonorrhea, especially the ones acquired in foreign countries become resistant to antibiotics.
- The second major category of STD infection is caused by viruses.
- Genital herpes virus, warts (which are caused by the human papillomavirus, or HPV) and hepatitis B can be treated to make some of the symptoms improve, but there are no cures. Hepatitis B infection is sometimes fatal. Once infected with viruses like these you may be infected for life.
- Another viral infection is HIV. There are currently some treatments for HIV and the immune disease it causes, AIDS. Even so, there is no cure for HIV or AIDS. HIV is usually fatal.
- Each STD has unique physical features that help the health care provider determine which STD a person has. While frequently there may be no sign of an STD infection, many times the physical evidence can be striking as we will now see. This next set of slides shows the effects of STDs on the human body and what they look like.

STDs in Men and Women **SLIDE 99**

Urethritis **SLIDE 100**

- Urethritis is typically caused by chlamydia, gonorrhea or both and can be treated and cured with antibiotics. In women, if these infections remain untreated they can go on to cause PID.
- This slide shows the typical discharge from the penis of a man infected with gonorrhea. You can't always tell if a man Is infected, especially if he has "NGU" or non-gonococcal urethritis, which is mostly due to chlamydia.

Vaginitis **SLIDE 101**

- Vaginitis can be caused by yeast, trich, or bacterial vaginitis (BV). Although yeast is not sexually transmitted, both trichomonas and bacterial vaginitis can be sexually transmitted. All of these infections can be treated and cured.
- This slide shows the entrance to the vagina in a woman with a bad yeast infection. The white patches are due to the infection on the genital skin.

PID **SLIDE 102**

- PID is usually caused by chlamydia, gonorrhea or both. Although the acute infection can be treated and cured the scaring in the tubes that the infection leaves behind can lead to chronic pain, infertility and ectopic pregnancy.
- Here we have the stages of PID from the woman feeling severe pain in her lower abdomen. At this time there is pus in the cervix, or birth canal, and also in the tube. The pus can drip out of the tube onto the ovary. Finally, the infection scars the tube as can be seen here.

Syphilis Chancre **SLIDE 103**
SLIDE 104

- Open sores like these of a penis and these on the vulva of a woman are actually painless. In women they can often occur inside the vagina where no one can see them. They can also occur on or in the mouth.
- Chancres in men and women last only a few weeks and then disappear. But the infection does not go away, it continues on to the next stage.

Syphilis Rash **SLIDE 105**

- Sometimes the first thing you notice is the skin rash which happens a few weeks after getting infected.
- It takes a few weeks to go away. Once the rash is gone, you are still infected.
- If not treated, syphilis can last a lifetime, you can pass it to sexual partners and to your baby during pregnancy.
- It is easily treated with antibiotics.
- The only way you can tell if you or your partner has syphilis is by a blood test.

Right now the STD infections we have just discussed are caused by bacteria and other bugs which can all be successfully treated with antibiotics if detected early enough.

Next, we will look at STD infections caused by viruses that can be treated but cannot be cured.

Herpes Simplex Virus (HSV) in Women **SLIDE 106**

- HSV causes painful blisters or sores in and around the vagina, anus, and surrounding skin in woman, usually occurring in groups or clusters shown here.
- Herpes can also cause sores on the cervix which usually have no symptoms.

Herpes Simplex Virus (HSV) in Men **SLIDE 107**

- Here we see the blisters and sores from herpes on the penis.
- Even though these blisters heal completely, the virus remains in your body, and repeated outbreaks can occur every few months to years.
- When there are no symptoms, the infected person can be shedding, or giving off the herpes virus, and could easily infect a sexual partner. Once a person gets herpes, it is always necessary to use condoms to protect others.
- The medication most often used for herpes is called acyclovir, which helps lessen the pain and length of time the blisters and ulcers last. It does not cure the herpes infection.

Baby with Severe Herpes **SLIDE 108**

- A baby can become infected from the mother at the time of birth. Since babies are very vulnerable to infections, especially STDs, they can suffer severe consequences like brain damage and even death.
- Pregnant women may need to have a cesarean section to protect the baby.

Human Papillomavirus (HPV) in Women **SLIDE 109**

- HPV is the virus that causes genital warts and is the most common STD.
- Here we see the warts on a woman's genitals
- Warts that occur on the moist skin of the genital area are usually pink and soft; warts that appear in genital areas that are dry usually appear white and rough or hard to the touch.
- In as many as seven out of 10 people infected with HPV warts are not visible because they are inside the urethra or on the cervix. These people may not know they have HPV.

Cancer on Cervix **SLIDE 110**

- HPV is now known to be the cause of most of cases of cervical cancer for women later in life. Here we see cancer of the cervix due to HPV.

HIV/AIDS **SLIDE 111**

HIV affects the entire body **SLIDE 112**

- HIV infection causes AIDS. There is no cure for AIDS which in most people results in their death, often years after the initial infection. This slide shows how HIV affects every organ in the body such as infection of the brain called meningitis, muscle pain or myalgias, the lymph nodes and so forth.

Some viral STD infections can be treated with drugs or other types of treatment to make some of the symptoms improve, but there are no cures for viral STDs. This means that once you are infected with a viral STD you may be infected for life.

? What kind of protection can you expect when using a condom with someone who had warts or herpes?

Let participants respond.

- Condoms can help prevent both men and women from becoming infected with the wart and herpes virus, but obviously do not cover all the genital skin. Therefore, even with the use of condoms, either partner may become exposed to the virus that causes warts or herpes when they have contact with infected genital skin that is not covered by the condom. Condoms, while good, are not fool-proof.

- Abstinence, or no contact with infected sexual organs or fluids is the only way to completely prevent any STD infection.

Now let's move on to talk more specifically about HIV/AIDS. We have already seen that the number of HIV/AIDS cases in women is increasing, primarily through heterosexual transmission.

HIV/AIDS is an awful, devastating and stigmatizing disease that tremendously impacts not only the person infected with HIV, it affects, his/her family and friends, as well.

HIV/AIDS Iceburg **SLIDE 113**

- The clinical spectrum of HIV is similar to an iceberg, only a small portion (the tip of the iceberg) of people infected are those that have symptoms. Most persons with HIV do not have any symptoms and they may not know they are HIV positive.

Course of HIV Disease **SLIDE 114**

- This slide shows all the stages of HIV infection from **initial infection** through advanced disease to death. The horizontal line is a rough estimate of the time from one stage to the next.
- These stages are characterized by a gradual dropping of protective immune cells called "CD4" cells. As the numbers of these cells decrease in the blood due to HIV gradually killing them off, the infected person progresses from no symptoms and normal CD4 counts to the advance stage when there are only a few CD4 cells and very serious illnesses are able to occur.
- When a person becomes infected with HIV, the virus duplicates itself in the body's protective system (the immune cells) and spreads throughout the body within days.
- Within 2 to 4 weeks of that initial infection, the person may have flu-like illness.
- Within 3-6 months of the initial infection, the HIV blood test turns positive and the infected person can now be diagnosed with an HIV infection.
- For about the next five years, the person infected with HIV generally feels good and looks entirely normal. However, HIV is killing the immune cells. This is known as the ***early disease phase***.
- After about 5-10 years after the initial infection, the infected person usually develops what is known as ***intermediate disease stage***. During this phase the HIV infected person develops serious illnesses.
- As the disease progresses to the ***advanced disease stage***, full blown AIDS develops. This phase of the disease usually occurs after 10 years from infection and is characterized by severe illnesses such as wasting; individuals in this stage of the illness will die soon.
- There are new drugs called protease inhibitors which are currently used in combination with other drug "cocktails" which help people with HIV/AIDS feel better. All these drugs together work to boost the immune system to protect the body against infection and cancer, but it is important to remember that there is still no cure for HIV/AIDS.

The next few slides will help us to discuss the health problems associated with HIV infection in more detail.

Initial HIV Infection **SLIDE 115**

- This slide describes what happens in the first few weeks (2-4 weeks) after a person becomes infected with HIV. About half (50%) of the people will have no symptoms or any hint that they have the HIV virus in their bodies.
- The other half of the people will experience a flu-like syndrome with fever, fatigue, muscle and joint aches, body rash, mouth sores, sore throat and large lymph glands.
- All of us have the flu at some time or another. We probably had some symptoms like the person with HIV has. In addition, the HIV infected person can feel nauseated, can vomit and have diarrhea. Infected people lose their appetite and loose weight during this stage. Some newly infected people also notice that they sweat a lot at night (night sweats).

? If the symptoms of HIV are so much like symptoms of the flu, how do people know they have HIV?

Let's look at what a blood test can tell us.

The HIV Blood Test **SLIDE 116**

- The test becomes positive six to twelve weeks after a person becomes infected with HIV. The test measures antibodies which are special protein molecules that the body makes when it's trying to fight off the virus after first being infected.

A positive test (+):

- When someone tests positive for HIV, a second test is performed to make sure that the first results were accurate. These tests together are very accurate, if they are both positive, the person is infected with the virus. In rare cases this test may be negative for longer than three months after a person becomes infected with HIV, but eventually it becomes positive.

A negative test (-):

If the test is negative there are two possible reasons:

- The person does not have the HIV infection.

or

- The person really has an HIV infection, but it is too early for the body to form antibodies in the blood which make the test positive.

The Window Period **SLIDE 117**

- This period of time between when a person becomes infected with the HIV virus, and the point in time when the HIV blood test turns positive is often called the "window period".

- A person infected with the HIV virus can still pass it on to another person during this "window period", before the test turns positive. For example, if a person is tested for HIV today, but had unsafe sex a month ago, the HIV test would be negative even though the person could actually be infected with the HIV virus and pass it on to another person.

Early Disease **SLIDE 118**

- After a person has had the primary infection and the HIV test has turned positive, as we mentioned earlier he or she will experience a period of wellness. They have no symptoms, feel and look totally normal.

- They have no unusual infections or diseases.

- This period can last from weeks up to 10 or more years.

BUT

- The HIV virus is slowly multiplying and gradually killing off the important protective immune cells.

- The virus is inside the body and can be passed through body fluids or unprotected sex to other people

When the immune cells fall to a critical level (less than 500 CD4 or immune cells), then the infected person starts to move to the more advanced stages of disease and begins to experience serious illnesses.

The next few slides will review the problems that infected men, women and children experience as the infection progresses beyond the early disease stage and through the intermediate and late stages to death.

Intermediate-Advanced Disease **SLIDE 119**

Infected persons experience years of serious health problems. The most common are listed here. They can have:

- Chronic fever
- Lung infections (pneumonias)
- Infections of the blood known as sepsis
- Serious eye infections that can lead to blindness
- Nerve and brain problems including seizures
- Chronic diarrhea that leads to severe weight loss and wasting and
- Cancers of the skin, gut and lymph glands called Kaposi's sarcoma.

Examples of the last two conditions are on the next two slides.

VIDEO: "good to go"

Objectives: Simulate social and emotional issues women Marines may face early in their military careers (e.g., during service school)

Time: 45 minutes.

Materials: VCR, monitor, extension cord.

Format: Video presentation (27 minutes).
Discussion of Video (~20 minutes).

Procedures: Facilitator will present the video and hold a discussion of the video.

Discussion: The goals of the discussion are to:

(1) Reinforce main messages of the video.

(2) Provide an opportunity for participants to interact with each other about reproductive health issues and decision-making.

(3) Assist participants in problem-solving and "thinking ahead" about potentially risky situations, feelings of loneliness, etc.

(4) Answer any questions the participants might have about the video, etc.

The facilitator should emphasize the following points:

(1) All women respond to stress/difficult situations in different ways. Some ways are effective, others can place you at increased risk for unplanned pregnancy and/or STDs.

(2) Women Marines are few in number and will receive a great deal of attention from male peers (and civilians) and must be careful to think about their health decisions.

(3) Loneliness plays an important role in women making risky decisions about sex and alcohol use.

(4) Alcohol use is associated with risky sexual practices.

(5) Any person having unprotected sex is at risk for one or more STDs and unplanned pregnancy.

(6) Any person who has one STD could have another, including HIV, which may have no symptoms.

(7) When you are unclear about what to do, seek out social support from friends, senior leadership, family services, chaplain, etc.

(8) Any person who has engaged in unprotected sex should be screen for STDs.

(9) The most effective way to prevent an unplanned pregnancy or STDs is sexual abstinence. However, if sexual activity is your choice then you must choose an effective method of contraception that is right for you and use latex condoms with each sexual encounter.

CONCLUSION: session 3

- In this session we looked at STD/ HIV/AIDS in great detail, including transmission issues, and the consequences of these infections in women and children.
- In our next session we will focus on the role that alcohol plays influencing a person's ability to make healthy decisions. We will also get practice communication skills with potential sexual partners.
- We sincerely hope this session will be of some help to you. Thank you for your participation.
- The next session in the program will be (state the exact, date, time, and place of Session 4, our final session.

OVERVIEW: session 4

Objectives: To provide participants with basic information on the effects of alcohol and the relationship alcohol plays in sexual risk-taking behavior.

Provide participants with refusal communication skills and skills in the proper use of condoms.

Time: 5 minutes.

Materials: Slide projector and screen, slide set 9, writing board and markers, "Sexuality and Alcohol Use," "Steps in Proper Condom Use," and "Refusal Skills" handouts.

Format: Interactive slide presentation, group discussion, role-play exercises.

Outline:

Introduction:	Review of Session 3 Overview of Session 4
Module 1.	Slide Set 9: Alcohol Effects and Use
Module 2.	Alcohol Use and Sexuality Exercise
Module 3.	Condom Relay Exercise
Module 4.	Role-Play: Refusal Skills
Module 5.	Health Care Access
Module 6.	Wrap-Up Exercise

REVIEW: session 3

Briefly remind participants of what took place during Session 3 and give an overview of Session 4.

Review of Session 3:

During Session 3 we:

- Discussed the transmission of STDs and HIV.
- Discussed "safe," "safer," and "unsafe" sex.
- Discussed how to determine or evaluate personal risk.
- Discussed the signs, symptoms and consequences of STDs/HIV/AIDS in women.

Overview of Session 4

In today's session we will:

- Discuss the effects and use of alcohol.
- Discuss how alcohol use relates to sexual decision-making and risk.
- Practice proper use of condoms.
- Practice communication with sexual partners who does not wish to use protection against STD/HIV acquisition.
- Conclude with a wrap-up exercise of the entire program.

OVERVIEW: *alcohol effects and use*

Objectives: To provide participants with information about the effects and use of alcohol.

Time: 20 minutes.

Materials: Slide projector and screen, slide set 9. "Pattern of Alcohol Use, " "Alcohol Use and Sexuality," "Wrap-Up Exercise" handouts.

Format: Interactive slide presentation.

References:

Giarratano SC. Tobacco, Alcohol and Drugs: Choosing Health High School. ETR Associates, 1997, Santa Cruz, CA.

Dimeff LA, Baer JS, Kivlahan DR, Marlatt GA. Brief Intervention for College Student Drinkers: A Harm Reduction Approach for Alcohol Abuse. The Addictive Behaviors Research Center, 1996, Seattle, Washington.

Overview Of Alcohol Effects And Use

- In this program we have discussed the transmission, prevention, and consequences of STDs, including HIV. During our discussion we eluded to the relationship between use of alcohol and drugs and getting STDs or placing oneself at risk for an unplanned pregnancy.
- Although in the military, substance use is not tolerated, use of alcohol is prevalent and has been linked with militaries since the beginning of time.
- Drinking alcohol affects one's ability to make sound, healthy decisions. It often promotes risky sexual behaviors that can lead to the acquisition of STDs, including HIV infection as well as unplanned pregnancies. So we need to discuss alcohol use and abuse if we want to prevent the transmission of STDs/HIV.
- Alcohol use is a common occurrence in much of society. It plays an important role in how we socialize with one another.

? What are some social situations in which drinking alcohol is a common activity?

Let participants respond.

Common Situations for Alcohol Use

SLIDE 127

Celebrations

- Alcohol may be a common feature of celebrations like birthdays, weddings, anniversaries, graduations from school, and promotions at work.

Parties

- Alcohol is usually served at parties and other informal get-togethers.

Bars or Clubs

- Drinking alcohol is a large part of the bar and club social scene where many people go to meet people or to socialize with friends.

Dating

- Alcohol use is a common occurrence in many romantic situations.

Other Comments:

- In fact, use of alcohol in any of these social situations can lead to other risky behaviors such as driving under the influence of alcohol, aggressive or violent behavior, or decisions to engage in "unsafe" sex.
- Since drinking alcohol is common in our society, we may not take the time to really consider the reasons why we drink alcohol. First, let's take a minute to think about what we expect to happen when we drink alcohol?
- These expectations influence why and when we choose to drink.

? With that in mind let's examine reasons for drinking. Why do some people drink?

Let participants respond.

Reasons for Drinking Alcohol **SLIDE 128**

Relax

- After a hard and stressful work day or work week, many people use alcohol to unwind.

Socialize

- As we have already mentioned, most parties or social gatherings serve alcohol. It becomes routine to drink while socializing.
- In addition, some believe that drinking helps them to relax in difficult social situations. In the military some women feel that they need to drink alcohol to keep up with their male peers in order "to prove themselves or to just fit in".

Forget Problems

- Many people use and abuse alcohol in order to forget their problems in an attempt to make the emotional pain of loneliness or feelings of isolation go away, even if it's only for a short period time.

Boredom

- People drink alcohol because there is nothing else to do. They are bored and hope that by drinking they will make a difficult evening (or weekend) go by more quickly.
- They may also want to get away from the routine day-to-day activity and stress of school or work, and try to escape the fear of boredom.

As we can see, there are many reasons for drinking alcohol. The amount and frequency we drink varies widely, ranging from experimental to compulsive use. Typical patterns of alcohol use include the following; experimental use, occasional use, situational or recreational use, intense use, and compulsive use.

Give out the Pattern of Alcohol Use Handout.

? If you drink alcohol, what pattern do you follow?

Let participants respond.

Patterns of Alcohol Use **SLIDE 129**

Experimental Use

- In experimental use, alcohol is often used first, out of curiosity, typically at a party or other social events.
- In general, this occurs during adolescence or in the early twenties, during high school or college. Some teens or young adults choose not to drink after this initial experimentation, but for others this is where their patterns of drinking is established.

Occasional Use

- Alcohol may also be used socially or occasionally for a special event like a birthday or anniversary celebration, a wedding, promotion, or for a holiday celebration.
- The risks from this type of use are considered low if alcohol is used in moderation.

Situational Use

- Situational or recreational use of alcohol is associated with particular activities like performing on a test. The prevalent thinking in this situation is that alcohol will "calm the nerves".
- People who use alcohol in this way may often feel they need its effects to get through certain situations. They run the risk of developing psychological and physical dependence on alcohol.
- Binge drinking or heavy alcohol use may occur with this pattern of drinking as well.

Intense Use

- Intense use of alcohol is characterized by increasing amounts over long periods of time. At this level, drinkers habitually turn to alcohol whenever they are faced with a problem. They believe they can not function without alcohol.

Compulsive Use

- At this level, drinkers cannot control their alcohol use. They are emotionally dependent on alcohol and may also be physically dependent. Alcohol becomes more important than family, friends, and career.

- If you drink, but do not consider yourself an intense or compulsive drinker it is important to understand that even occasional and situational patterns of alcohol use have the potential to cross the line over to alcohol abuse.

? Now that we have reviewed patterns of use, I'll ask again,

- **"What pattern do you follow?"**

Basic Facts about Alcohol **SLIDE 130**

Now that we have discussed the context and some reasons people choose to drink, let's turn our attention to some basic facts about the effects of alcohol.

- As a substance, alcohol is classified as a central nervous system depressant. This means that it suppresses the functions of the brain, including the center that controls inhibition.

- Small amounts of alcohol make you feel a sense of excitement, however, as your blood alcohol level (BAL) rises the depressant effect takes over.

- Alcohol affects how the brain functions, including your thinking, body, and behavior.

Blood Alcohol Level **SLIDE 131**

- The blood alcohol level (BAL) is a ratio of alcohol to blood in the bloodstream which is usually reported as a percentage. For example, a BAL of .10 means that one-tenth of 1% of fluid in the blood is alcohol. A BAL is used to determine legal limits for drunk driving. In most states, a person with a BAL of .80-.10 is considered legally drunk (not all states have the same legal limits).

Factors that Influence Effects of Alcohol **SLIDE 132**

A variety of factors influence the way alcohol affects the body, let's review some of them:

Type of Alcoholic Drink **SLIDE 133**

- Alcoholic drinks vary in how much alcohol they contain per once. Some drinks have a greater alcohol content than others.
    - Beer has about 4% of alcohol by volume (about a half ounce in a 12-ounce beer).
    - Wine has 10%-14% of alcohol.
    - Hard liquors such as whiskey, rum, tequila, vodka, and other distilled beverages contain up to 40%-50% alcohol. The alcohol content in these types of liquors is reported as "proof". For example, an 86-proof bottle of whiskey is actually 43% alcohol.

Alcohol Content **SLIDE 134**

- A 12-ounce beer, a 4-5 ounce glass of wine, and a 1 ½ -ounce shot of whiskey all have about the same amount of alcohol – about ½ ounce. However, it is important to note that outside of the United States, the amount of alcohol contained in these beverages varies from country to country. In many instances, they are much stronger.

Factors that Influence Effects of Alcohol **SLIDE 135**

Amount of Alcohol Consumed

- The liver can process only about ½ ounce of alcohol per hour. If the liver could immediately oxidize (metabolize) all of the alcohol that reaches it, people would never get drunk.

Time Elapsed Between Drinks

- The shorter the time between drinks the faster the rise in BAL. This is usually measured as the number of drinks consumed in one hour. For example, someone who drinks only one beer in an hour will usually feel little effect. But if a person drink four beers in an hour, 1½ ounces of alcohol would remain in the body at the end of the hour.

Gender and Body Weight Composition

- A heavier person is able to tolerate more alcohol in the bloodstream and oxidize alcohol more rapidly.
- Body fat plays a role in how alcohol is metabolized in the body; alcohol does not diffuse rapidly into body fat. For example, if a woman and a man weigh the same and consumed the same amount of alcohol, the concentration of alcohol in the woman's blood will be higher than the man's, because the woman has more body fat and less body fluid.

Other gender-related factors that influence why women achieve higher levels of intoxication than men when they weight the same and consume the same amount of alcohol:

Body Water Composition

- Women have less body water composition compared to men (45%-55%) versus men (55%-65%).

Alcohol Dehydrogenase

- Women have less alcohol dehydrogenase (a stomach enzymatic activity that helps in the metabolism of alcohol) than men. Thus, making them more vulnerable to the development of problems from drinking such as liver cirrhosis, brain damage, and other health conditions due to consistent abuse of alcohol.

Hormonal Changes in Women

- During periods of menstruating women maintain the peak degree of intoxication for longer periods than non-menstruating or post-menstruating women; this is also true for women using oral contraceptives.

Empty or Full Stomach

SLIDE 136

- Food in the stomach at the time of drinking slows down the absorption of alcohol in the bloodstream. A hungry person can become drunk more easily than a person who has just had a full meal.
- While it is a good idea to eat before and during drinking, one can not rely on food to stay sober.

Dehydration

- Dehydration means a lack of body fluid or moisture. A person who is dehydrated can become intoxicated more easily than a well hydrated person.

Medicines and Drugs

- Using both legal and illegal drugs can affect how alcohol is absorbed and broken down in the body. Taking drugs, even over-the-counter drugs can increase your BAL.

Mental and Emotional State

- People who want to get drunk are more likely to act intoxicated regardless of the amount they drink.
- If a person drinks when upset or depressed, alcohol's depressive effects are accelerated. People who are happy or excited may seem to become intoxicated more rapidly.

Along these lines, there are two important points to consider about the expectations or the results of drinking alcohol.

? To what extent is the effect of alcohol use psychological (based on our expectations of what we think will happen) or pharmacological (based on the true effects on the body, thinking, behavior)?

Let participants respond.

Effects of Alcohol: Psychological or Physiological? **SLIDE 137**

- Research has shown that both men and women experience disinhibiting effects (tipsy, high, relaxed, more sexually aroused, etc.) from the belief that they drank a small quantity of alcohol.
- This research showed that men generally become <u>less</u> socially anxious while women become <u>more</u> socially anxious when they believe that they drank alcohol. Also, men perceive greater sexual arousal, but the fact is that with alcohol use both men and women sexual response is decreased.
- Men tend to feel more aggressive when they think they consumed alcohol.

Previous Experience with Alcohol **SLIDE 138**

- People who have experience with or tolerance to alcohol need more alcohol (a higher BAL) to get the feeling of being high.
- Some people think that this is a benefit since they perceive that they will stay "more in control" with a high BAL (although the body and brain may be feeling the physical effects of alcohol).
- Experienced drinkers learn to modify their behavior or overcompensate for the effects of alcohol. In fact, a greater tolerance to heavy alcohol can be expensive, place more strain on the body's organs and increase the risk of developing long-term problems.

Effects Of Alcohol On The Brain **SLIDE 139**

- Alcohol is a depressant and suppresses the brain's inhibition centers and affects the highest brain functions which control thinking, memory, learning, and decision-making.
- When alcohol is consumed in low to moderate amounts (as the BAL is rising) during the initial phase of drinking alcohol use leads to a mild arousal (excitement, increased energy, and increased confidence).
- With continued use, (with a decreasing BAL, even if it is high) these effects decrease, leading to feelings of depression, fatigue or lack of coordination.

Effects of Alcohol on Brain **SLIDE 140**

- Some people usually drink more (and faster) trying to find that initial high, the effects are just the opposite.
- Large amounts of alcohol slow reflexes and perception, impair coordination and depress all areas of the brain and central nervous system. The brain's ability to control and maintain heartbeat, respiration and consciousness is affected by higher concentrations of alcohol in the blood. That's why people pass out and some die when they drink too much alcohol.

Effects of Alcohol on Behavior **SLIDE 141**

- Alcohol does not increase physical nor mental ability. People who drink alcohol may think that they are better speakers, drivers, partygoers, or lovers, but this is not true.
- Behavioral problems include slurred speech, blurred vision, loss of balance, uncoordinated movements, and mental confusion. Also, people react differently when intoxicated, some feel happy, others depressed, and others aggressive or enraged.

Effects of Alcohol on Body **SLIDE 142**

- As we stated earlier, the liver oxidizes (or metabolizes) alcohol in the body. Nothing but time helps the liver oxidize alcohol. Coffee, cold showers or fresh air will not speed up the process.
- After excessive drinking, many people experience a hangover. Symptoms include severe headaches, vomiting and weakness. Time is the only cure.

Causes of hangovers:

- Alcohol irritates the central nervous system and dehydrates the body.
- Alcohol increases the production of gastric juices which irritates the stomach lining.
- The body experiences withdrawal.

Blood Alcohol Effects **SLIDE 143**

- .02% People who are light-moderate drinkers (don't drink often or very much) begin to feel some effect (driving skills are impaired).
- .04% Most people begin to feel relaxed.
- .06% Judgment is somewhat impaired; people are less able to make rational decisions about their capabilities such as having "safer-sex" or driving safely.
- .08% Definite problem with of muscle coordination; impairment of driving skills; increased risk of nausea and slurred speech.
- .10% Reaction time is dramatically reduced.
- .15% Balance and movement are impaired; risks of blackouts, passing out, and accidents are increased dramatically.
- .30% Most people lose consciousness.
- .35% The central nervous system is substantially depressed; risk of death.

Effects of Alcohol on Sleep and Performance **SLIDE 144**

- Alcohol consumed on a given day can compromise a person's performance for days to come as a result of the effects of alcohol intoxication on sleep.
- The extent to which a person's cognitive and physical performance is impaired by sleep deprivation is largely due to the degree to which the he/she was intoxicated at the time he/she fell asleep.
- Deep sleep becomes more disrupted the more the individual is intoxicated.

Effects of Alcohol on Pregnancy **SLIDE 145**

- Women who drink alcohol during pregnancy may have babies with birth defects or abnormalities known as Fetal Alcohol Syndrome (FAS).

  The effects of FAS include:

  - Reduced weight and size before and after birth.
  - Mental retardation.
  - Learning disabilities.
  - Abnormal facial development.

APPENDIX C:

Overview and Selected Materials: "Fitness for Life"

FITNESS FOR LIFE

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SESSION 1

INTRODUCTION: GOALS AND OBJECTIVES OF THE PROGRAM

OBJECTIVES: To define the goals of the Wellness program.
To set the tone for participation in the sessions

TIME: 10 minutes

MATERIALS: None for Introduction to sessions

PROCEDURE: **If you have not already done so, introduce yourself.**

During the next 4 sessions we will be discussing health issues related to general health and issues specific to women. This program is designed to help you as women Marines maintain and improve your performance and lifestyle not only today but for the future. We will be discussing a variety of topics, some of which you may be familiar with but other materials may be new. **PLEASE ASK QUESTIONS,** this is your time to learn about yourself and how to take care of yourself. It is hoped that this program will be fun and provide you with information that will help you.

I. This program is about:

A. Improving your performance and lifestyle through nutrition and healthier food choices.

B. Improving and maintaining your fitness performance.

C. Reducing the risk of sport or physical training injuries and learning how to treat sport injuries.

D. Learning how your diet can place you at risk for cancer.

E. Learning about breast cancer and giving you the skills to do a self breast examination.

F. Learning about cervical cancer and how to reduce your risk of cervical cancer.

G. Understanding that it is important that you start to reduce your risk of osteoporosis TODAY!

H. Learning to recognize stress and steps one can take to reduce your stress.

I. The key to this program is you. It really is about learning that you have choices and that what you do or don't do can affect you the rest of your life. You are not going to be asked to give up anything, but to maybe make better choices for yourself and your future.

II. INTRODUCTION TO THE SESSIONS

There are 4 different sessions. Each session will address issues that will help maintain a healthy lifestyle not only as a woman but as a woman Marine.

A. Session 1

1. Nutrition for Peak Performance and Healthy Living

B. Session 2

1. Fitness

C. Session 3

1. Sports Injury Prevention and Treatment
2. Weight Management

C. Session 4

1. Breast Cancer and Self Breast Examination
2. Cervical Cancer
3. Osteoporosis and the Prevention of Osteoporosis
4. Stress Reduction

SESSION 1: OVERVIEW:

Objectives: By the end of this session the participants will be able to :
Summarize the seven dietary guidelines.
Identify the five food groups of the Food Guide Pyramid.
Be able to use food labels to meet nutritional needs.
Identify healthier choices when eating at a mess hall.
State the importance of a balance diet and the nutritional requirements for peak performance.

Time: 2 Hours

Methods: Lecture, Discussion Groups, and Questions and Answers

Materials: Worksheets, Slides, Video: *Food Labels*

References:

1. Achterbergs, C., McDonnelle, E., Bagby, R. How to Put the Food Guide Pyramid into Practice. *J American Dietetic Association* 1994: 94 (10); 1030-5.

2. The Food Guide Pyramid: Health and Human Services. 1995.

3. *Nutrition and Your Health: Dietary Guidelines for Americans.* Health and Human Services. 1995.

4. Vance, A. *Fitness for Life.* Brown & Benchmark. 1993

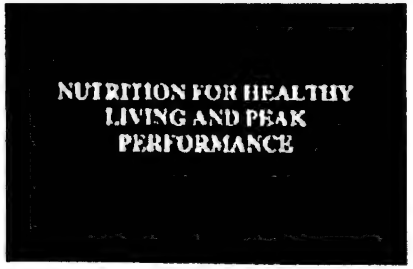
5. Clark, N. *Sports Nutrition.* Sports Medicine Systems.

6. Katch, F., McArdle, W. *Introduction to Nutrition, Exercise, and Health.* Lea & Regiger. 1993

Outline of Instruction	Instructor Activity

NUTRITION FOR HEALTHY LIVING AND PEAK PERFORMANCE

SHOW: NUTRITION FOR HEALTHY LIVING AND PEAK PERFORMANCE



I. INTRODUCTION

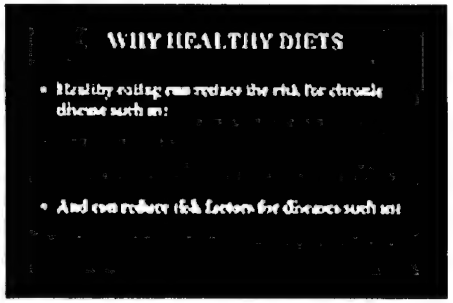
We are what we eat and drink. The nutrients in the foods we eat play a role in everything we do. They provide the energy necessary to perform daily tasks, whether we are resting or engaged in some type of activity. Besides providing energy, nutrients provide the needed elements for maintaining and repairing the different functions of the body.

Healthy eating can reduce the risk for chronic diseases such as heart disease, certain cancers, osteoporosis, strokes, and diabetes. In addition it can reduce the risk factors for chronic diseases such as obesity, high blood pressure and an elevated cholesterol.

Healthier eating will help you remain in standards with Marine Corps regulation.

Q. Why are healthful diets important? WAIT FOR RESPONSE

SHOW : WHY HEALTHY DIETS



II. 24 HOUR DIET RECALL

Take a few moments and try and write down everything you have eaten in the last 24 hours. This includes all meals, snacks, beverages.

Don't worry only you will see it, so be honest. Only you will be looking at it, to see how your diet compares to what is recommended.

Pass out worksheets for A DIET RECALL FOR 24 HRS
Give them about 10 minutes to fill out.

SHOULD REFER TO THIS THROUGH OUT SESSION

DIET RECALL WORKSHEET*

BREAKFAST

LUNCH

SNACKS

DINNER

SNACKS

*** INCLUDE ALL BEVERAGES AS WELL**

Outline of Instruction | **Instructor Activity**

III. HELPFUL TOOLS

A. A healthy diet contains essential nutrients to meet the bodies needs. It also includes a balance of fat, carbohydrates and proteins to reduce risk for chronic diseases.

1. To help people make healthier diet choices dietary guidelines were written by an advisory committee for the U.S. Department of Health and Human Services and the U.S. Department of Agriculture. These are simple guidelines that if followed will provide the basis of sound nutritional choices every day. The seven dietary guidelines are:
   a. Eat a variety of food
   b. Balance the foods you eat with physical activity to maintain or improve your weight
   c. Choose a diet with plenty of grain products, vegetables, and fruits.
   d. Choose a diet low in fat, saturated fat, and cholesterol.
   e. Choose a diet moderate in sugars
   f. Choose a diet moderate in salt and sodium.
   g. If you drink alcoholic beverages, do so in moderation.

B. TOOLS:

• THE FOOD PYRAMID GUIDE:

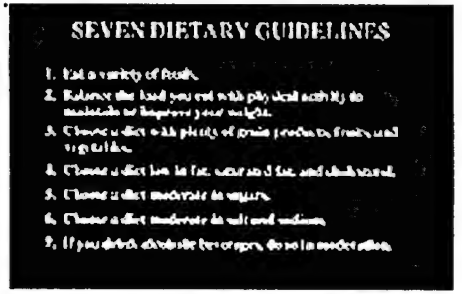
1. The food guide pyramid was designed to represent foods that should make up your dietary intake. By understanding which foods contain the types of the nutrients your body needs, you will be able to make healthy choices. The great

SHOW: HELPFUL TOOLS

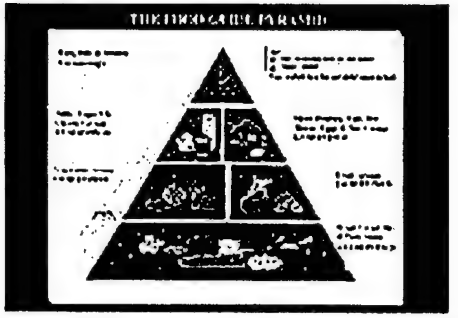
Q. What is a healthy diet?
WAIT FOR RESPONSE

D. Tell the participants that each of these guidelines will be explained in greater detail later.

SHOW: 7 DIETARY GUIDELINES:



SHOW: THE FOOD PYRAMID



D. Some mess halls will even post the food guide pyramid to help remind people to make good choices.

Outline of Instruction | **Instructor Activity**

thing about the food guide pyramid is how simple it is. The most servings should be from the largest areas of the pyramid.

2. It illustrates the importance of balance among food groups in a daily eating pattern. A majority of the food choices should be from the grain product group, then vegetable group and the fruit group. Eat moderately from milk and meat group. Finally choose the least amount from foods that are high in fats and sugars.

3. By choosing the recommended amount of food from all sections of the Food Guide Pyramid you will be eating foods with a variety of essential nutrients and the right amount of calories

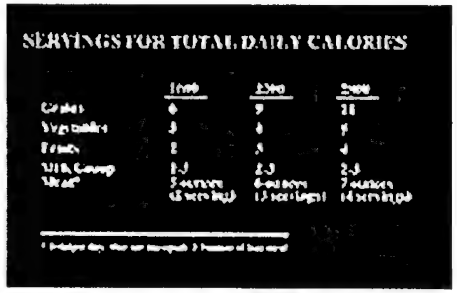
a. How much? This depends upon the number of calories you need,which depends on how active of a lifestyle you lead. Choose the lesser number in each category if you need fewer calories.

	1600	2200	2800
Grains	6	9	11
Vegetables	3	4	5
Fruits	2	3	4
Milk Group	2-3	2-3	2-3
Meat	5 ounces 2 servings	6 ounces 3 serving	7 ounces 4 servings

Examples of servings are:
Grains = 1 slice of bread, Vegetables = 1/2 cup cooked, Fruits = 1 apple, Milk = 1 cup, Meat = 1/2 chicken breast.

I. The lower number of servings represent a 1600 calorie diet. Most women's needs fall some where between 1600 - 2200 calories. If you feel you need less then 1600 calories they should eat the number of servings for 1600 calories but reduce calories by reducing fat in the diet. Eating fewer than the recommended servings will not supply the needed nutrients.

SHOW: SERVINGS PER TOTAL DAILY CALORIES:



D. You should not eat less than 1200 calories per day unless advised by your doctor or a dietitian. It is hard to get all the vitamins and minerals your body needs on less than 1200 calories a day.

Outline of Instruction

Instructor Activity

- **FOOD LABELS:**

1. One of the best tools that you can use every day to help you make healthier choices as consumers is the food label.

2. This quick video will help point out what information you can find on a food label and how to use it to your advantage.

Review of food labels:

Q. How can you tell, for example, if a claim for "reduced" is higher or lower than "light"?
A. Check the % Daily Value (% DV) for each--you don't need to learn the definitions.

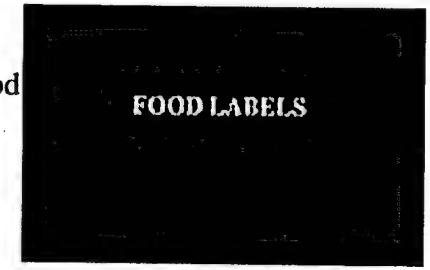
Q. Can you believe these claims?
A. Yes. The terms are now defined and regulated by FDA--they have to mean what they say.

Q. *Why is it important to check the serving size information?*
A. It is the basis for determining all the quantitative information on the label--for example, the calories and the % Daily Values and it makes it easy to compare similar foods.

Q. Does it tell you how much you should eat?
A. No, it reflects what people typically eat in a serving; it is not a recommendation.

Q. What does "calories from fat" let you know?
A. It lets you know if this food is relatively high or low in fat by showing how many of the calories in <u>one</u> serving come from fat.

SHOW: FOOD LABELS



Supplies: Have plenty of food labels on hand, and make sure they are a wide variety.

Q. Who has read a food label before? WAIT FOR RESPONSE

<u>Show: 71/2 MINUTE VIDEO: FOOD LABELS</u>

After video pass out food labels. Go over the questions having the participants using the food labels. This is to be a general discussion from the group as a whole.

Outline of Instructions | **Instructor Activity**

Q. What does the % Daily Value (DV) for total fat tell you?
A. It tells you how much one serving contributes to you daily maximum allowance (of fat). It does not represent the percent of fat in a serving. Example: If one serving of pizza contains 40% DV for fat, that means you have 60% of your fat allowance left for the other foods you eat that day.

Q. Do you need to calculate percentages to use the %D V.
A. No. The % DV, based on 2000 calories, does the math. The %DV for fat can help you follow nutrition experts' advice not to eat more than 30% of your calories from fat. Add up the %DV for fat in all the foods you eat in a day: the goal is to eat less than 100% for fat. Nutrients like calcium the goal is to eat at least 100% of the %DV.

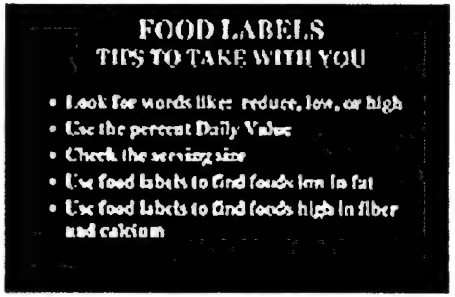
Q. What if you don't eat 2,000 calories per day.
A. Most people don't know exactly how may calories they eat in a day. You can still use the % DV to compare products and see which are higher or lower in a nutrient.

Tips to take with you:
-Look at words like: "reduce", "low", or "high", on food packages they are quick leads to finding better choices.
-Use the percent Daily Value to make quick food comparisons and to tell if a food is high or low in nutrients, such as calcium or sodium.
-Check serving size and compare how much you actually eat with the serving on the package. If you eat two servings, don't forget to double the calories and other nutrients.
-Use food labels to switch to foods lower in fat and saturated fat, and foods higher in fiber and calcium.

The Food Guide Pyramid and the Nutrition Fact Label serve as tools to put the Dietary Guidelines to practice.

Q. Any other questions concerning food labels? WAIT FOR RESPONSE

SHOW: TIPS TO TAKE WITH YOU



BUT I EAT IN THE MESS HALL EXERCISE

Objective: To enhance participants' decision-making skills relating to selecting healthier food choices when eating at a mess hall based on their knowledge of dietary guidelines.

Time: 30 minutes

Materials: Salad Bar Selections Sheet (1). Daily Menu Selection # 1-8 (8 different menus)

Procedure: Divide the participants into four groups. Give each group any two of the Daily menus selection worksheets and the Salad Bar selection worksheets.

Tell the participants that these are actual daily menu plans used by a Marine Corps mess hall. Explain to the participants that each group's job is to evaluate each meal selections and decide as a group which would be the healthier selections.

Pass out the worksheets, any two Daily Menus selection plus the Salad Bar selection worksheet. Ask them to read over the first meal choices and begin discussing as a group what are the healthy choices and why. Have them spend a few minutes with each meal trying to come to a decision as a group, and mark their selections on the worksheet.

Have them repeat this procedure for each of the meals covering the two days provided.

After everyone is done, have one person from each group report their answers to the larger group. Spend a few minutes discussing each food choice for all meals. After each item, ask if there was any disagreement within the group about their answer, and if anyone in the larger group disagrees, address any questions or concerns that come up.

INSTRUCTOR: Keep track of the number of servings for each of the levels of the food pyramid guide.

Points to Discuss:

1. Did they pick a variety of foods?

2. Make sure that they pick the required serving selections from each group of the food pyramid guide for each day?

3. What were the fats that were selected? Did they know that they had selected a fatty food?

4. Did any group have dessert? There is nothing wrong with having dessert, the key is not to do it every meal or everyday.

Points to Emphasize

You can make healthy choices and the food pyramid guide will help you. It is ok to have a hamburger on occasion, but it is unhealthy to have one every day. Be aware of hidden fat and added fats. While you can not control the fat in the foods prepared by the mess hall, you control which food you select and you control the butter on toast or sour cream on potatoes.

SESSION 1

DAILY MENU SELECTION SHEET: # 1

BREAKFAST

Oatmeal
Scrambled Eggs
Fried Bacon
Creamed Ground Beef

Steamed Rice
Cinnamon Rolls

Fresh Fruit
Bagels
English Muffin
Maple Syrup
Peanut Butter

Milk (1% White or Chocolate)
Fruit Juice

Hard Cooked Eggs
Minute Steaks
Hash Brown Potatoes

Texas French Toast
Apple Coffee Cake

Toast (Rye, White, Wheat, or Raisin Bread)
Cream Cheese
Jam, Jelly, Honey
Butter Patties

Coffee, Tea, Hot Chocolate,

LUNCH

Salad Bar
Roast Turkey
Streamed Rice
Cauliflower
Chicken or Turkey Gravy

Sugar Cookies
Banana Cream Pudding with Whipped Topping
White, Rye, Wheat Bread
Butter Patties

Beef Noodle Soup
Pork Chop Suey
Mashed Potatoes
Peas & Carrots
Fresh Fruit

Cherry Pie
Ice Cream
Jello Parfaits

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced),

Short Order: Lunch only

Hot Wings

Deep Fried Chicken
French fries
Baked Beans

Cheeseburger (single or double)

Corn Dog
Fried Rice

SPECIALTY BAR: Offered at both lunch and dinner

Sliced Roast Beef
Tuna Salad
Relish Tray
Corn Chips
White, Rye, Wheat Bread

Sliced Corned Beef
Sliced Bologna
Potato Chips
Hoagie Rolls

DINNER:

Salad Bar
Lasagna
Spaghetti

Cottage Fried Potatoes
Mixed Vegetables

Cherry Pie
Banana Cream Pudding with Whipped Topping
Fresh Fruit
Saltine Crackers
Butter Patties

Milk (1% White or Chocolate)
Carbonated Beverages

Beef Noodle Soup
Veal Steaks

Squash
Garlic Bread

Sugar Cookies
Ice Cream
Ice Cream

White, Rye, Wheat Bread

Coffee, Tea (hot or iced)

DAILY MENU SELECTION SHEET: #2

BREAKFAST

Hominy Grits
Scrambled Eggs
Baked Sausage Patties
Creamed Ground Beef

Eggs can be cooked to order
Hard Cooked Eggs
Baked Ham Slices

Steamed Rice
Pancakes

Hash Brown Potatoes
Donuts

Fresh Fruit
Bagels
English Muffin
Maple Syrup
Peanut Butter

Toast (Rye, White, Wheat, or Raisin Bread)
Cream Cheese
Jam, Jelly, Honey
Butter Patties

Milk (1% White or Chocolate)
Fruit Juice

Coffee, Tea, Hot Chocolate,

LUNCH

Salad Bar
Baked Tuna and Noodles
Parsley Buttered Potatoes
Black-eyed Peas

Bean with Bacon Soup
Grilled Ham Steak
Southern Style Greens
Pineapple sauce (for ham)

Apple Crisp
Peanut Butter Cookies
Jello Parfaits
White, Rye, Wheat Bread
Butter Patties

Marble Cake with Frosting

Ice Cream

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced),

Short Order: Lunch only

Deluxe Cheeseburger

Cheeseburger (single or double)

Tuna Melt
Fried Rice
Potato Chips

French fries
Baked Beans
Corn Chips

SPECIALTY BAR: Offered at both lunch and dinner

Cheese Pizza
Spaghetti
Garlic Bread

Lasagna
Meat Ball Sandwich

DINNER:

Salad Bar
Roast Pork
Fishwich

Bean and Bacon Soup
Baked Chicken

Rice Pilaf
Succotash
Brown Gravy

Parsley Butter Potatoes
Canned Wax Beans

Apple Crisp
Peanut Butter Cookies
Jello Parfaits
Fresh Fruit

Marble Cake with Frosting

Ice Cream

White, Rye, Wheat Bread
Butter Patties

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced)

DAILY MENU SELECTION SHEET: #3

BREAKFAST

Farina
Scrambled Eggs
Baked Sausage Links
Creamed Ground Beef

Steamed Rice
Texas French Toast

Fresh Fruit
Bagels
English Muffin
Maple Syrup
Peanut Butter

Milk (1% White or Chocolate)
Fruit Juice

Eggs cooked to order
Hard Cooked Eggs
Fried Bacon

Hash Brown Potatoes
Donuts

Toast (Rye, White, Wheat, or Raisin Bread)
Cream Cheese
Jam, Jelly, Honey
Butter Patties

Coffee, Tea, Hot Chocolate,

LUNCH

Salad Bar
Roast Veal
Steamed Rice
Corn

Vanilla Pudding with whipped topping
Lemon Cake with Frosting
Ice Cream
White, Rye, Wheat Bread
Butter Patties

Tomato Vegetable Soup
Fried Chicken
Potatoes Au Gratin
Black-eyed Peas

Chewy Nut Bars
Jello Parfaits

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced),

Short Order: Lunch only

Burritos
Cheeseburger
Submarine Sandwich
Nachos Supreme
Potato Chips

Chili Con Carne
Deluxe Cheeseburger
French fries
Baked Beans
Corn Chips

SPECIALTY BAR: Offered at both lunch and dinner

Enchiladas
Burrito
Refried Beans
Salsa
Sour Cream

Taco Meat
Mexican Rice
Mexican Corn
Tortilla (Flour and Corn)
Shredded Lettuce

DINNER:

Salad Bar
Chicken Fried Steak
Turkey Pot Pie
Buttered Egg Noodles
Lima Beans

Vanilla Pudding with whipped topping
Lemon Cake with Frosting
Ice Cream

Saltine Crackers
Butter Patties

Milk (1% White or Chocolate)
Carbonated Beverages

Tomato Vegetable Soup
Meat Loaf
Mashed Potatoes
Steamed Rice
Mushroom Gravy

Chewy Nut Bars
Jello Parfaits
Fresh Fruit

White, Rye, Wheat Bread

Coffee, Tea (Hot or iced)

DAILY MENU SELECTION SHEET: #4

BREAKFAST

Oatmeal
Scrambled Eggs
Baked Sausage Patties
Creamed Ground Beef
Steamed Rice
Pancakes

Eggs cooked to order
Hard Cooked Eggs
Baked Ham Slices

Hash Brown Potatoes
Donuts

Fresh Fruit
Bagels
English Muffin
Maple Syrup
Peanut Butter

Toast (Rye, White, Wheat, or Raisin Bread)
Cream Cheese
Jam, Jelly, Honey
Butter Patties

Milk (1% White or Chocolate)
Fruit Juice

Coffee, Tea, Hot Chocolate,

LUNCH

Salad Bar
Fried Fish
Turkey A La King
Baked Macaroni and Cheese
Southern Style Greens

Minestrone Soup
Fried Shrimp
Steamed Rice
Cauliflower

Strawberry Cake
Oatmeal Raison Cookies
Jello Parfaits
White, Rye, Wheat Bread

Apple Pie
Fresh Fruit
Ice Cream
Butter Patties

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced),

Short Order: Lunch only

Pizza Supreme
Deluxe Cheeseburger
Bacon Cheeseburger
Turkey Salad Sandwich
Fried Rice
Potato Chips

Hot Wings
Grilled Hot Dogs
Fishwich w/ cheese
French fries
Baked Beans
Corn Chips

SPECIALTY BAR: Offered at both lunch and dinner

Egg Foo Young
Yakisoba
Fried Rice
Vegetable Stir Fry

Sukiyaki
Egg Rolls
Steamed Rice

DINNER:

Salad Bar
Beef Stroganoff
Baked Chicken
Steamed Rice
Pinto Beans w/ Ham
Dinner Rolls

Minestrone Soup
Salmon Cakes

Broccoli
Chicken or Turkey Gravy

Strawberry Cake
Oatmeal Raison Cookies
Jello Parfaits

Apple Pie
Fresh Fruit
Ice Cream

Saltine Crackers
White, Rye, Wheat Bread

Butter Patties

Milk (1% White or Chocolate)
Carbonated Beverages

Coffee, Tea (Hot or iced)

SESSION 2: OVERVIEW

Objectives: By the end of this session the participants will be able to :
Define fitness.
Know how to evaluate the intensity of their exercise for maximum benefit.
Develop a personal fitness plan.

Time: 2 hours

Method: Lecture, exercises, group discussions

Materials: Slides,

References:

1. Physical activity and public health. A recommendation from the Centers for Disease Control and Prevention and the American College of Sports Medicine, *JAMA*, 273(5):402-7, Feb 1, 1995.

2. Almeida, S., Maxwell Williams, K., et all (1997). A Physical Training Program to Reduce Musculoskeletal Injuries in US Marine Corps Recruits. (Tech Rep. 97-2B). San Diego Ca, Naval Health Research Center.

3. Fitness Fundamentals: Guidelines for Personal Exercise Programs, Developed by the President's Council on Physical Fitness and Sports

4. Vance, A. *Fitness for Life*. Brown & Benchmark. 1993

5. Stretching, the truth. UC Berkeley Wellness Letter, Nov 1994

6. Good Matches in Cross-Training. UC Berkeley Wellness Letter, May 1995

7. Pop Quiz. UC Berkeley Wellness Letter, Nov 1995

SESSION 2

FOOD WHIZ GAME

Objective: To increase participants' knowledge about the even dietary guidelines, healthy food choices using the food pyramid as a guide and nutrition for peak performance.

Time: 30 minutes

Materials: Question and Answer Sheets

Procedure: Divide the participants into 2 groups. Each team should invent a name for itself. Explain that this is a quiz game to test their knowledge of the seven dietary guidelines, the food pyramid and nutrition for peak performance.

Let them know that team work is very important in coming up with a response to each question.

Instruct them on the rules of the game:

1. Each team will have 30 - 40 seconds to respond.

2. Correct answers receive "2" points.

3. If partially correct they will receive "1" point, and the other team will have chance to give the rest of the answer and will receive "1" point.

4. Flip a coin to determine which team gets the first opportunity to answer the first question.

5. Remember if they are incorrect then the other team will have a chance to answer the question.

SESSION 2

1. **What are the 2 ways you deplete your energy stores?**

   • Training hard/ having a prolonged work out longer then 90 minutes

   • A low carbohydrate diet.

2. **What are the 2 types of carbohydrates?**

   • Simple • Complex or starches

3. **How do we lose water from our bodies?**

   • Breathing • Sweating
   • Urinating

4. **What are the 3 of the seven dietary guidelines?**

   • Eat a variety of foods
   • Balance the food you eat with physical activity to maintain or improve your weight
   • Choose a diet with plenty of grain products, vegetables, and fruits.
   • Choose a diet low in fat, saturated fat and cholesterol
   • Choose a diet moderate in sugar
   • Choose a diet moderate in salt and sodium
   • If you drink alcohol beverages do so in moderation

5. **What is considered moderation when drinking alcohol for women and men?**

   • 1 drink per day for women

   • 2 drinks per day for men

6. **What are the recommended servings per day for grain products?**

   • 6 - 11 servings per day

7. **Fats should be no more than what percentage of your total daily calories?**

   • 30%

8. **Cholesterol found in foods is only found in animal products. True or False**

   • True

9. **Why are carbohydrates important?**

   • Best and most available sources of energy

10. **What are the 5 food groups on the food pyramid?**

    • Grain Products • Vegetables
    • Milk, Cheese, and Yogurt • Fruits
    • Meat, Fish, Poultry, and Nuts.

11. **What are the recommended number of servings from the milk, yogurt and cheese group?**

    • 2 servings
    • if pregnant or breast feeding or if a woman is under the age of 24 - 3 servings.

SESSION 2

12. What are the recommendations for keeping hydrated during exercise?

- Drink cool water 10 - 15 minutes before exercise
- Drink water during exercise
- Rehydrate after exercise

13. Muscles are more receptive to refueling 1 -2 hours after hard exercise (greater the 90 minutes) ? True or False

- True, the muscles are more receptive to refueling with fluids and foods high in carbohydrates 1 - 2 hours after hard exercise

14. A training diet should have what percentage of the total calories as carbohydrates?

- 60 - 70%; At least 48% should be complex

15. What are the recommended number of servings for vegetables?

- 3-4 servings per day

16. What is at the top of the food pyramid guide?

- Sugars and Fats; use sparingly

17. Cholesterol comes from plant products? True or False

- False; Cholesterol only come from animal products such as meats, eggs, and dairy products such as milk, cheese etc.

18. How many serving per day should you have of meat, poultry, fish, dry beans, eggs, and nuts group?

- 2 - 3 servings per day.

Outline of Instruction | **Instructor Activity**

III. CARDIOVASCULAR CONDITIONING AND TRAINING

A. Introduction

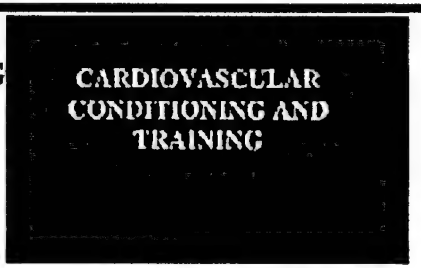
You test your cardiovascular conditioning every time you complete the 3-mile PFT run. You can choose to just complete the PFT or with a little time and training you can improve your score and complete the PFT with your best possible effort.

1. The first step is to build an aerobic base. Don't think you can run 5 miles the first time you go out running and not feel exhausted afterwards. You must gradually build up to that many of miles.
    a. Aerobic means with oxygen: Energy that is produced uses oxygen.
    b. Aerobic exercise works on the heart, lungs, muscles and the circulatory system. It increases the body's ability to bring in oxygen and use it.
        (1) It cause the heart muscle to become strong as well as the leg muscles.

2. One key fact to remember is that speed is not the primary factor in developing cardiovascular endurance. You can get the same benefits in cardiovascular conditioning and caloric use from running as you can from brisk walking, but you may have to walk longer to reach your target heart rate. You will burn the same amount of calories walking a mile as you will running a mile, or course it takes less time to run it.

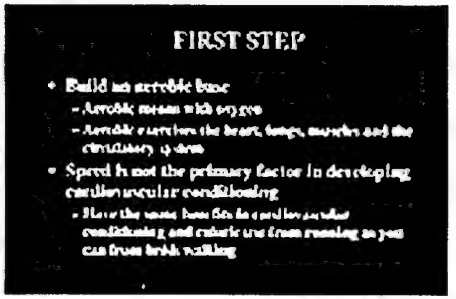
3. Examples of cardiovascular exercises includes: jogging, swimming, aerobic dance, basketball, brisk walking.

SHOW: CARDIOVASCULAR CONDITION AND TRAINING



Q. What is cardiovascular condition and training?
WAIT FOR A RESPONSE

SHOW: FIRST STEP



Outline of Instruction	Instructor Activity

B. Recommendations

1. Frequency: Do cardiovascular training 3 - 5 days per week to achieve and maintain cardiovascular conditioning.

2. Intensity: To achieve optimum cardiovascular conditioning the exercise should be moderate - to produce a heart rate of 130 to 150 beats per minute or 60-75% of maximum heart rate.

a. To calculate maximum heart rate complete each of the following steps:

(1) Take 220 subtract your age. This is your maximum heart rate.

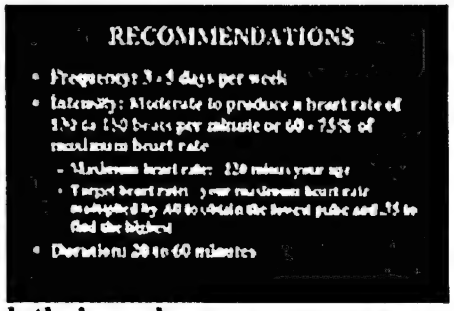
(2) Then multiply your maximum heart rate by .60 to obtain the lowest pulse you should have and .75 to find the highest.

b. To take your pulse you must:. Place your index finger and middle finger on your wrist about a half inch below your thumb. Then count the number of beats for 10 seconds then multiply by 6. This is your heart rate.

3. Duration: In order to reach maximum benefits from cardiovascular training, each session should be 20 to 60 minutes, however, it depends on intensity. A lower the intensity workout should be longer in duration ; a higher intensity can have a shorter duration.

4. It is important to do exercises that use large muscle groups such as jogging, swimming, and aerobic dance.

SHOW: RECOMMENDATIONS



Demonstrate how to take heart rate and have all the participants take their pulse:

Make sure everyone can find their pulse.

Outline of Instruction	Instructor Activity

C. Developing Your Cardiovascular Training Program

When beginning your cardiovascular training program remember:

1. Warm -Up for 10 - 15 minutes: This allows for gradual redistribution of blood flow. To prepare the muscles, and circulatory system for exercise.
    a. Warm up activities should relate to the exercise that you are doing. For example: you can do walking or light jogging before running.

2. Stretch for 5 minutes: How you stretch is important; you want to gradually stretch your muscles to help lengthen them. Don't jerk, or use rapid bouncing movements to stretch. This can injure the muscles.

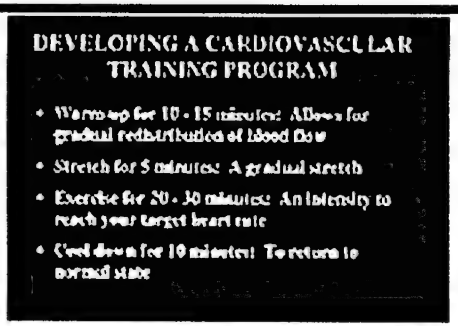
3. Exercise for 20 - 30 minutes: It should be of intensity that will make you reach your target heart rate.

4. Cool down 10 minutes: Allows the body to return to its normal state. Again activities should be similar to the exercise that was performed. It is necessary to gradually reduce the intensity. This should then be followed by slowly stretching.

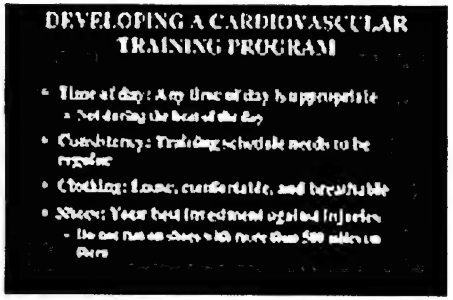
5. Time of Day: Anytime of the day is appropriate for exercising. Try not to exercise during the heat of the day or right after eating. The time of day is a personal preference. However, remember that company runs are set by the CO. It may be best to train at the time of day you are expected to do the company run .

6. Consistency: Your training schedule needs to be on a

SHOW: DEVELOPING CARDIOVASCULAR AND TRAINING PROGRAM



SHOW: DEVELOPING CARDIOVASCULAR AND TRAINING PROGRAM



Outline of Instruction | **Instructor Activity**

regular basis. Set aside specific days of the week and a consistent time of day to PT. This will help in maintaining your fitness program.

a. Regular PT at least 3-5 days per week is needed to gain and maintain cardiovascular endurance. You begin to loss conditioning in as little as 2 days. So don't skip more then 2 days of exercising.

b. People who set regular PT schedules tend to stick with it their programs better then those who do not.

7. Clothing: Your clothing should be loose and comfortable and breathable; You should dress cooler then you think it is. Do not just run in a jog top, a loose cotton top will absorb your sweat and help you to stay cool.

a. Do not wear rubberized suits. They can cause you to lose too much water, and they do not breath so you won't be able to cool down. They do not help in weight reduction. You are only loosing water.

8. Shoes: Shoes are your best investment against injuries.

a. Your shoes should not have over 500 miles on them.

9. Motivation: Staying motivated over the course of time is the hardest part of any physical fitness program. It can take up to 6 weeks of a consistent PT program to make it become habit.

a. Some simple tips are:

(1) Find someone to PT with (they should be at your level).

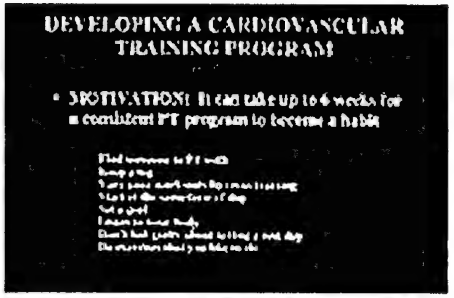
(2) Keep a log. This can help show your progress.

(3) Vary your work outs by cross training. Change your aerobic exercise; run a couple of

D. Running shoes work just as well for walking as they do for running, but they should not be used for high impact aerobics.

D. Many people tend to run in shoes until the sole and heel have worn down, however with running shoes the midsole has well lost its' ability to cushion and protect your legs from impact before the shoe looks worn out. That is why you should not run in shoes with over 500 miles of use.

SHOW: CARDIOVASCULAR PROGRAM: MOTIVATION



Outline of Instruction	Instructor Activity

days, then swim or bike or participate in aerobic dance. You can add variety to your work out by changing the route of your run or the place where you swim.
(4) Start at the same time of day. Set time aside, make it a priority.
(5) Set a goal whether it is not to fall out of a company run or to improve your PFT time. It can keep you going.
(6) Listen to your body. Physical fitness can not be achieved all in one week. Don't exercise if you are hurt.
(7) Don't feel guilty about taking a rest day. They can be very beneficial in preventing injuries.
(8) Do exercises that you like to do. If you prefer to bike more then run, then bike more often then you run. Just remember that in the Marine Corps you are expected to do company runs. But once you have a good aerobic base you should begin to find the company runs much easier.

SESSION 3: OVERVIEW

Objectives: By the end of this session the participants will be able to:
Explain how to reduce the chance of overuse injuries and other sport related injuries.

Time: 2 Hours

Method: Lecture, Exercises, Group Discussions

Materials: Slides, Category titles for Jeopardy Game, Individual Eating Quiz

References:

1. Vance, A. *Fitness for Life*. Brown & Benchmark. 1993

2. Good Matches in Cross-Training. UC Berkeley Wellness Letter, May 1995

3. Fitness Fundamentals: Guidelines for Personal Exercise Programs, Developed by the President's Council on Physical Fitness and Sports

4. The Facts About Weight Loss Products and Programs: US Food and Drug Administration Brochure 1992.

5. Katch, F., McArdle, W. *Introduction to Nutrition, Exercise, and Health.* Lea & Regiger. 1993

6. *Health* , New York Feb 1984, From Parlay International 1989.

Outline of Instruction | **Instructor Activity**

V. BASIC FIRST AID FOR SPORTS INJURIES

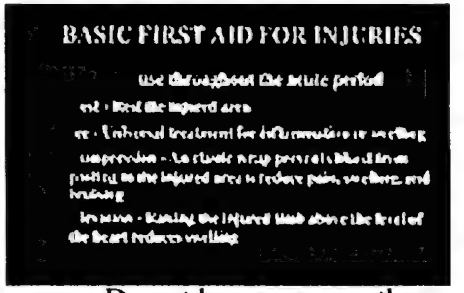
SHOW: BASIC FIRST AID FOR SPORTS INJURIES

A. Introduction:

If you have an injury, adhere to the following principles. You will need to reduce your workout volume and intensity when you start again. This is what's meant by detrained.

B. RICE:

SHOW: RICE



RICE (Rest, Ice, Compression, Elevation) is used throughout the acute period. This usually lasts 12 - 24 hours for mild injuries, 24 to 72 hours for moderate injuries, and 72 hours or longer for serious injuries. If there is little improvement by 72 hours, seek medical care.

1. Rest: You should rest the injured area. Don't stress it further. You may also want to splint or wrap the injured area to keep it immobilized and at rest.

2. Ice: Ice is the universal treatment for inflammation or swelling. Applying ice to an injured area decreases blood flow, reduces swelling, relaxes muscle spasm, and has a numbing, pain relieving effect. While you are resting, you may want to consider applying ice for 30 minutes, removing it 15 minutes and reapplying it for another 30 minutes.

D. Ways to ice: You can fill up a paper cup with water, freeze it and use it for a ice massage. Fill up a baggy with ice and place over area. Do not have on more then 30 minutes. Do not use the "Blue Ice" used to keep food cool as this is too cold for the body.

3. Compression: An elastic wrap prevents blood from pooling in the injured area. This reduces pain, swelling, and bruising. Don't make the bandage too tight, it should be snug but comfortable. If your fingers or toes are numb or turning

D. Make sure you wrap up the limb towards the heart, not down the limb. For example: if you are wrapping your knee, start below the knee and work up towards your thigh. Don't wrap down to the calf.

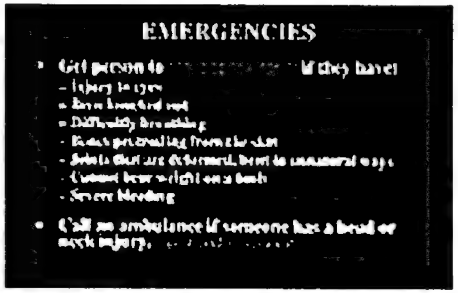
Outline of Instruction | **Instructor Activity**

blue or white, the elastic wrap is too tight. Using an elastic bandage can help, but it does not protect you from reinjuring.

4. Elevation: Raising the injured limb above the level of the heart uses gravity to increase blood flow away from affected area. This will help reduce swelling. It will also reduce the throbbing sensation you feel when blood is pumped through an injured area.

C. Emergencies:

SHOW: EMERGENCIES



1. Some injuries occur that may be serious. Go to an emergency room if you have:
   a. Injury to the eyes
   b. Been knocked out
   c. Difficultly breathing
   d. Bones protruding from the skin
   e. Joints that are deformed, bent in unnatural ways, can't be used
   f. Cannot bear weight on a limb
   g. Severe bleeding

2. Call an ambulance if some one has a head or neck injury. Hard hits to the head can be serious. If you suspect a neck injury, it may do more harm to move the person. Wait until help arrives.

3. If loss of consciousness, vision, or hearing occurs, seek immediate medical attention.

SESSION 3

FITNESS QUIZ

Objective: To increase participants' knowledge about fitness principles and sport injury prevention.

Time: 30 minutes

Materials: Question and Answer Sheets

Procedure: Divide the participants into 2 groups. Each team should invent a name for itself. Explain that this is a quiz game to test their knowledge of the fitness principles and sport injury prevention.

Let them know that team work is very important in coming up with a response to each question.

Instruct them on the rules of the game:

1. Each team will have 30 - 40 seconds to respond.

2. The team leader will select the category and the level.

3. Correct answers get "2" points.

3. If partially correct they will receive "1" point, and the other team will have chance to give the rest of the answer and will receive "1" point.

4. Flip a coin to determine which team gets the first opportunity to answer the first question.

5. Remember if they are incorrect then the other team will have a chance to answer the question.

SESSION 3

1. What are the 3 key elements in a fitness program?

- Cardiovascular
- Muscle strength
- Flexibility training

2. What is detraining?

- The loss of fitness seen after stopping training.

3. What does R.I.C.E. Mean?

- Rest
- Ice
- Compression
- Elevation

4. What is the recommendation for frequency in cardiovascular training?

- 3-5 days per week

5. You should not increase your workout by more then how much weekly?

- 10 - 15%

6. What is the current recommendation for physical activity (exercise)?

- 30 minutes or more of moderate-intensity at least 5 times per week. 7 is better.

7. What are the required steps when exercising whether cardiovascular, muscle, and flexibility training?

- Warm up
- Exercise
- Stretch
- Cool down

8. What does resistance mean in muscle conditioning?

- Weight that is to be moved

9. What 3 ways can you increase your muscle strength and endurance work outs?

- Increase number of sets
- Decreasing recovery (rest) time between sets.
- Increasing resistance

10. What are the 2 types of stretching for flexibility training?

- Ballistic
- Static

11. Which type stretching should you not do?

- Ballistic (which is bouncing while stretching), this can cause tears in the muscles.

SESSION 3

12. Shortening of the muscles and tendons result in what?

- Inflexibility

13. Calisthenics use what for muscle strength and endurance training?

- Body weight

14. How often should you do muscle training?

- 2 nonconsecutive days

15. How often should you do flexibility training?

- 7 days per week, or at least days you exercise.

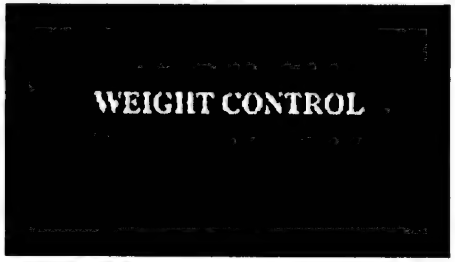
16. Give 3 ways you can reduce your risk of sport injury.

- Do not increase your intensity or volume more than 10-15% weekly
- Use proper exercise techniques and good body mechanics
- Warm-up and cool down
- Don't do two hard workout days of the same muscle groups in a row
- Do Cross-training
- Give injuries adequate time to rest and heal
- Use safety equipment
- Drink plenty of fluids

Outline of Instruction | **Instructor Activity**

WEIGHT CONTROL

SHOW: WEIGHT CONTROL



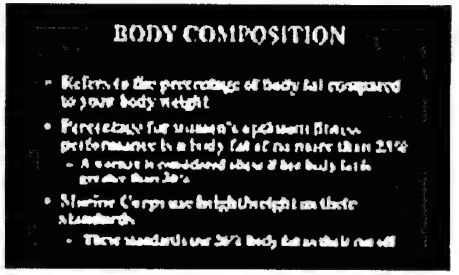
I. Introduction

As Marines you must meet weight standards as outline by the Marine Corps. Since measurements are taken twice a year, it is very easy to be caught up in a cycle of crash dieting right before the measurements are taken. The key is to maintain your weight throughout the year.

In Session One we discussed the seven dietary guidelines which are the keys to a healthier diet. They are the foundation for weight control. In particular, balance the food you eat with physical activity to maintain or improve your weight.

II. BODY COMPOSITION

SHOW: BODY COMPOSITION



Body fat should not exceed 23% as a measure for optimal fitness performance for women. Women with a body fat exceeding 30% are considered obese.

It must be noted that you must be within the Marine Corps standards that use weight/height. These standards use 26% body fat as their cut off. If you would like your body fat measured many MWR gyms have personnel that can take measurements.

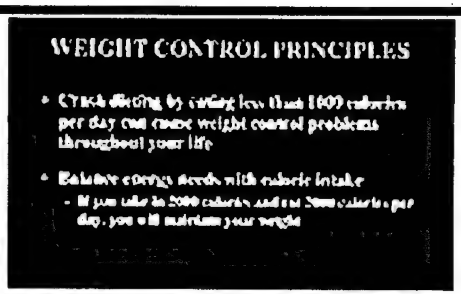
Outline of Instruction | **Instructor Activity**

III. WEIGHT CONTROL PRINCIPLES

A. Introduction

Crash dieting by severely reducing (less than 1000 calorie per day) your caloric intake can bring on weight control problems that can last a life time. Weight management is a matter of balance between your body's energy needs and the calories taken in. If you need 2000 calories and eat 2000 calories per day then you will maintain your weight. If you eat more calories per day than you need will gain weight over time. The reverse is true also.

SHOW: WEIGHT CONTROL PRINCIPLES



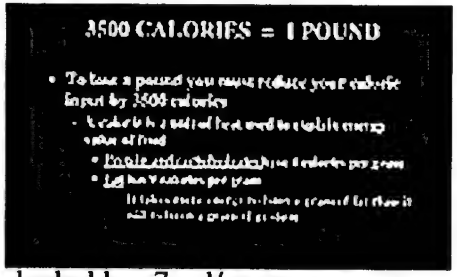
I. Will discuss this problem later.

B. 3500 calories equals 1 pound.

1. If you want to lose a pound you must reduce your caloric input by 3500 calories. To gain a pound you must eat an additional 3500 calories.
   a.. A calorie is a unit of heat used to explain the energy value of food.
      (1). Protein and carbohydrates have 4 cal/gm, Fat has 9 calories/gram.
   b. It will take more energy to burn a gram of fat than it will to burn a gram of protein. That is why it is important in any weight control program to reduce your fat intake.

Q. How many calories does it take to add a pound?
WAIT FOR RESPONSE

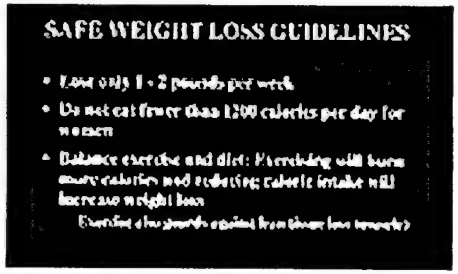
SHOW: 3500 CALORIES = 1 POUND



D. You can explain to them that alcohol has 7 cal/gram.

2. <u>Safe weight loss guidelines</u>:
   a. Lose only 1 - 2 lbs per week
   b. Don't eat less than 1200 calories per day for women, 1600 calories for men.
   c. Balance exercise with diet. Exercise will burn more

SHOW: SAFE WEIGHT LOSS GUIDELINES



Outline of Instruction	Instructor Activity

calories and reducing your caloric intake will increase weight loss.

(1) Exercise also guards against lean tissue loss (muscle).

C. Weight Cycling:

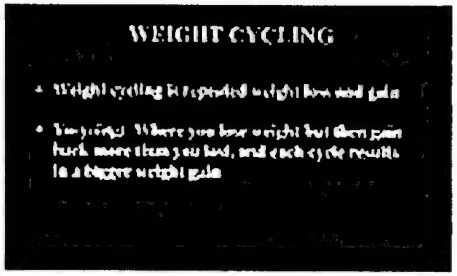
1. Weight cycling is repeated weight loss and weight gain cycles. A byproduct of weight cycling is yo-yoing. This is where you lose weight but then gain back more then you lose, and with each cycle there is a bigger weight gain. This is particularly seen with severe reduction of calories found in crash dieting. Of particular interest, most women lose more muscle when they lose weight and put on more fat each time they regain the "lost" weight!

a. Yo-yoing is thought to be due to a decrease in the metabolic rate. The body may resist weight loss by lowering the metabolic rate in effort to protect itself.

(1) It is more efficient with the food that is eaten. Your body says, "I know that they are going to reduce the food she eats so I am not going to use all of this right now."

b. As a result the time you will need to reduce your caloric intake even further, so the cycle is repeated over and over again to lose weight.

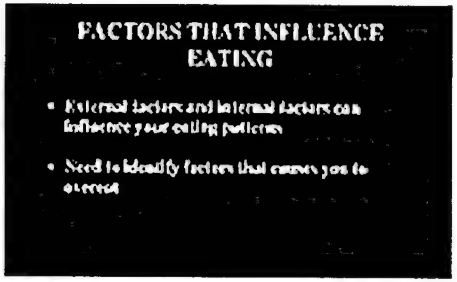
SHOW: WEIGHT CYCLING



IV. Factors that Influence Eating

We eat to provide our bodies with the energy it requires, and we eat to satisfy hunger. However, our eating patterns and behaviors are influenced by internal and external factors.

SHOW: FACTORS THAT INFLUENCE EATING



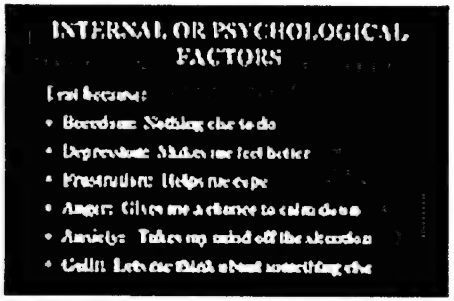
Outline of Instruction	Instructor Activity

1. It is important that a person who wants to control their weight identify any of these factors that can cause or "cue" them to eat especially, when they aren't hungry. When you know that certain factors influence your eating, you can work on replacing them with new behaviors that will not lead to a weight gain.

Q. What influences when or what you eat? WAIT FOR RESPONSE.

A. Internal or Psychological factors

SHOW: INTERNAL OR PSYCHOLOGICAL FACTORS



These factors are often linked to an increase in food intake.

1. Boredom: Nothing else to do.
2. Depression: Makes me feel better.
3. Frustration: Helps me cope.
4. Anger: Give me a chance to calm down.
5. Anxiety Takes my mind off of the situation.
6. Guilt: Lets me think about something else.

Outline of Instruction | **Instructor Activity**

B. External factors or cues

Clues that contribute to our eating behaviors and patterns include:

1. Sight of food: You see it you want it.

2. Taste of food: Sometimes it only takes just one small taste to want more.

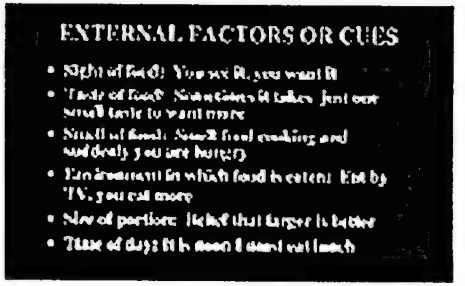
3. Smell of food: Smell food cooking and suddenly we are hungry.

4. Environment in which food is eaten. Eating in mess hall, there are limitations to selections and time to eat is govern for you. Eating at the club, maybe more alcohol with dinner, or making poor choices, eating more than normal because you paid for it. Eat by the TV; you eat more.

5. Size of portion is larger better?

6. Time of day. It is noon must eat lunch.

SHOW: EXTERNAL FACTORS OR CLUES

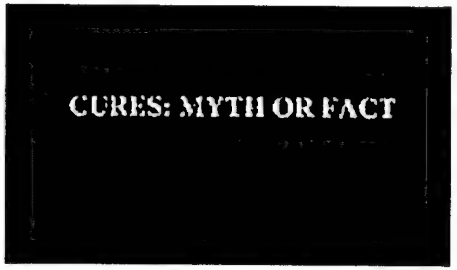


V. Magical Cures Myth or Fact

A. Introduction

The weight-loss industry is booming, a lot of "Miracle Diets" promise quick and easy fat loss and muscle gain. However, if they were such quick diets, how come they didn't stay around. There is no quick fix. One of the reasons that people fail in weight control is that they want easy and quick solutions to their weight problems. There is no magical cure or diet.

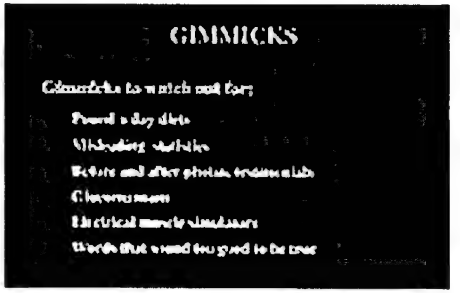
SHOW: CURES MYTH OR FACT



Outline of Instruction | **Instructor Activity**

Some diets may even cause weight loss but most of the time that is only temporary. These "diet" programs really don't teach you how to change how you live and eat to maintain a healthy amount of weight loss!

1. Most diets result in some weight loss in the first week because you are actually losing only water weight by restricting fluid intake-don't be fooled!



B. Gimmicks To Watch Out For:

SHOW: GIMMICKS

1. Pound a day diets. These are diets that promote losing a pound a day, claiming " lose 30 pounds in 30 days". What they don't tell you is that you have to buy bottles of expensive pills or special foods that aren't included in the original price.

Q. What are some of the advertisements on TV that you have seen? WAIT FOR RESPONSE
Q. Do you believe them? WAIT FOR RESPONSE

2. Misleading statistics. "Ninety percent of people lost weight on this diet". What they don't tell you is how many people were in the study group? How much weight did they lose? How soon did they gain the weight back?

3. Before and after photo testimonials. "I gained 30 pounds of muscle in just 2 months." Just because an individual looks better in one picture than she does in another, doesn't prove the product or program being advertised made the difference.

4. Glucomannam is advertised as the "Weight Loss Secret That's Been in the Orient of Over 500 Years." There is no real evidence supporting this plant root's effectiveness as a weight-loss product.

Outline of Instruction | **Instructor Activity**

5. Electrical muscle simulators. They have a legitimate use in physical therapy treatment. But the FDA has taken a number of them off the market because they were promoted for weight loss and body toning. When use incorrectly, muscle simulators can be dangerous, causing electrical shocks and burns.

6. Watch out for words that sound to good to be true. Such as: easy, effortless, guaranteed, miraculous, magical, breakthrough, secret, or exclusive.

C. Weight Loss Programs

In 1991, about 8,500 commercial diet centers were in operation across the country, many of them owned by a half-dozen or so well-known national companies.

Before you join a commercial program you should realize that recent studies have shown that the majority of the participants did not keep the weight off. No matter the program!

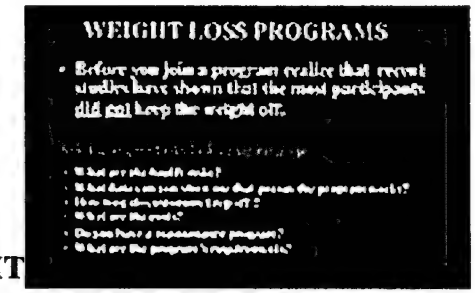
Before you sign up with a diet program, you might ask these questions:

1. What are the health risks?

2. What data can you show me that proves your program actually works?

3. Do customers keep off the weight after they leave the diet program? After one year? After two years or more?

SHOW: WEIGHT LOSS PROGRAMS



Q. What programs have you seen advertise? WAIT FOR RESPONSE

Outline of Instruction | **Instructor Activity**

4. What are the costs for membership, weekly fees, food, supplements, maintenance, and counseling? Is there a payment schedule?

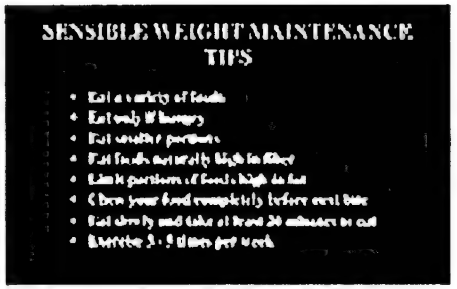
5. Do you have a maintenance program? Is it part of the package or does it cost extra?

6. What are the program's requirements? Are there special menus of foods, counseling visits, or exercise plans?

7. If I decide to stop the program for any reason, can I cancel? Do I get any money back?

D. Sensible Weight Maintenance Tips

SHOW: SENSIBLE WEIGHT MAINTENANCE TIPS



To achieve long-term results, it's best to avoid quick-fix schemes and complex regimens. Focus on making modest changes to your life's' daily routine. A balanced healthy diet and sensible regular exercise are the keys to maintaining your ideal weight.

Some other tips:

1. Eat a variety of foods.

2. Eat only if hungry. Don't be a clock watcher. Skipping meals is not encouraged, because you will tend to over eat later.

3. Eat smaller portions. Using a smaller plate will help you eat smaller portions but at the same time give the appearance of a larger portion.

Outline of Instruction	Instructor Activity
4. Eat foods naturally high in fiber: fruits, vegetables, grains.	D. Lean muscle mass uses more calories than fat even at rest.
5. Limit portions of foods high in fat: dairy products like cheese, butter, whole milk; red meat; and, cakes and pastries.	
6. Chew your food completely before taking your next bite.	
7. Don't eat in front of the TV- you tend to eat more.	
8. Do eat with friends. You tend to eat slower and less food.	
9. Exercise 3-5 times per week. Follow recommendations outlined in Session 2. a. Your exercise program should have both aerobic and strength training. Aerobic exercise will allow you to lose weight without cutting calories drastically. b. Muscles use more calories than fat. Strength training allows you to maintain your lean muscle mass to help you use more calories. Muscles burn calories while you are exercising, but also burn calories when you aren't exercising. (1) When you are "dieting" and you do not have strength training as part of your exercise program you will lose lean muscle mass as well as fat. If you do not maintain your muscle mass, your body will require fewer calories (because muscles burn more calories then fat). This means you will need to restrict you calories even further.	
10. Eat slowly and take at least 20 minutes to eat a meal. Your body takes that length of time to register fullness.	

SESSION 3

NUTRITION AND FITNESS JEOPARDY

Objective: To increase the participants' awareness of sound nutritional and fitness facts and to promote group discussion.

Time: 30 minutes

Materials: List of question or statement signs that list category and question points.

Procedure: Explain that you will be reading a statement and they need to answer in a question format. This is similar to the Jeopardy on television.

Divide the participants into 2 groups and have them select a team leader. Each team should invent a name for itself. Explain that this is a quiz game to test their knowledge of the sound nutritional and fitness principles and sport injury prevention.

Let them know that team work is very important in coming up with a response to each question.

Instruct them on the rules of the game, let them know that this is similar to the television game:

1. Each team will have 30 - 40 seconds to respond.
2. The team leader will select the category, and the level should be based on group discussion.
3. Points awarded are based on the level selected: "5", "4", "3", "2" or "1".
4. If incorrect the opposing team will have chance to give t the answer and will receive the points selected.
5. Flip a coin to determine which team gets the first opportunity to answer the first question.
6. Remember, if they are incorrect, then the other team will have a chance to answer the question.

CATEGORY: NUTRITION

1 POINT: You should not take in more then 30% of your daily calories of this nutrient

• What is fat?

2 POINTS: To lose a pound you must reduce your caloric input by this amount.

• What is 3500 calories

3 POINTS: The best and most available source of energy found in the diet?

• What are carbohydrates?

4 POINTS: This is considered moderation for consumption of alcohol.

• What is one drink for women and 2 drinks for men?

5 POINTS: The food pyramid recommends that you eat 3-5 servings from this section/category each day.

• What is vegetable?

CATEGORY: FITNESS

1 POINT: These are steps you need to consider when exercising.

• What is warm up, stretch, exercise, and cool down?

2 POINTS: This refers to the significant reduction in cardiovascular fitness within 2 weeks of stopping training.

• What is detraining?

3 POINTS: Static is the correct method of this exercise.

• What is stretching?

4 POINTS: Your fitness program should include something from each of these elements.

• What is cardiovascular training, muscle strength training and flexibility training?

5 POINTS: It is important not to increase your work outs by this percentage.

• What is 10 - 15%?

SESSION 3

CATEGORY: INJURY PREVENTION

1 POINT: This is used to treat injuries throughout the acute period.

- What is R.I.C.E.?

2 POINTS: This is the universal treatment for inflammation or swelling.

- What is ice?

3 POINTS: You should do this if someone has a head or neck injury.

- What is leave person in position and call an ambulance?

4 POINTS: This overuse injury is caused inflammation of the muscles and tendons of the lower leg.

- What are shin splints?

5 POINTS: To reduce your risk of injuries you need to do this before and after all vigorous exercise.

- What is warm-up and cool-down?

SESSION 4: OVERVIEW

Objective: Understand the importance of diet and exercise in the prevention of osteoporosis.

Explain the importance of monthly breast self exam, periodic clinical breast exam and mammography.

Describe the importance of a PAP exams for the prevention of cervical cancer.

Recognize stress.

Explain the ways that one can take to reduce their stress.

Time: 2 Hours

Methods Lecture, Group Discuss and Exercises

Materials Slides, video: Breast Cancer

References:

1. National Foundation of Osteoporosis: Fact Sheets 1997.
2. Vance, A. *Fitness for Life*. Brown & Benchmark. 1993
3. American Cancer Society. Cancer Facts and Figures - 1997.
4. CDC, Office of Women's Health. Breast and Cervical Cancer Fact Sheet - 1997.
5. Lovallo, W. *Stress and Health* . Sage Publications. 1997

SESSION 4

Review of Session 3:

During Session 3 discussed:

Types of Sport Injuries:

- Muscle Cramps
- Fatigue
- Stress Fractures
- Delayed Muscle Soreness
- Shin Splints

How to Prevent Sport Injuries

Treatment of Sport Injuries:

- RICE

Weight Management

In Session 4:

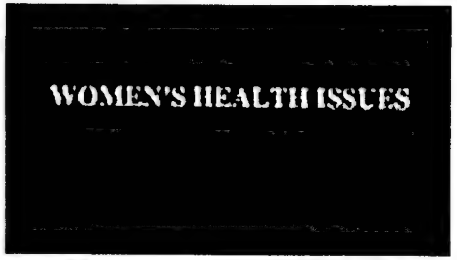
We are going to discuss:

- Osteoporosis
- Cancer Facts in particular breast and cervical cancers
- Stress Management

Outline of Instruction | **Instructor Activity**

WOMEN'S HEALTH ISSUES

SHOW: WOMEN'S HEALTH ISSUES



Introduction:

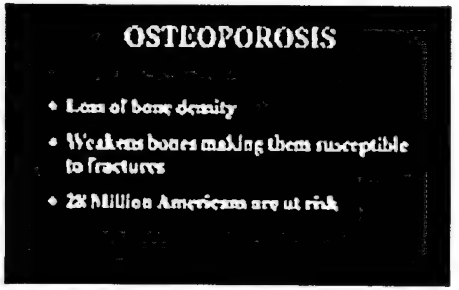
Over the past several sessions we have talked about measures we as women can take to improve and maintain our health. We are have only one body and while some parts can be fixed, replaced or removed, it won't be the same as the original one. We must take responsibility for our own health and well being.

Today we are going to shift gears and discuss some specific preventive medicine measures that you as a woman can and need to take to maintain your health, not only for today but for your future. We will be discussing osteoporosis, cancer prevention (specifically breast and cervical), self breast exam and PAP smears and finally stress management.

Q. What is osteoporosis? WAIT FOR RESPONSE

OSTEOPOROSIS

SHOW: OSTEOPOROSIS



I. INTRODUCTION

Osteoporosis is the loss of bone density or the thinning of the bones. This weakens the bone and makes them more susceptible to fractures. It can also result in a weaken vertebrae that causes compression and results in a shortening and curving of the spine. You can see this in many elderly women.
28 Million Americans, mostly women, are at risk for osteoporosis. It is usually found in older women (women who are postmenopausal) but it can occur in women in their 30's.

Q. Who is at risk for Osteoporosis? WAIT FOR RESPONSE

Outline of Instruction | **Instructor Activity**

II. RISK FACTOR

Bone density is at it's peak between 25 - 30 years old. The foundation is already determined by what you eat and drink before that time. However, there are certain risk factors that can increase your risk of getting osteoporosis, some of which you can't change.

1. Things you can't change

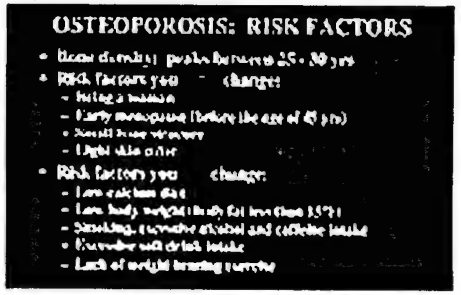
   a. Being a woman
   b. Early menopause (before age 45)
   c. Small bone structure
   d. Light skin color. Caucasian and Asian women are at a greater risk of getting osteoporosis. However, African-Americans and Hispanics can be at risk as well.

2. Things you can change

   a. Low body weight (body fat less than 15%)
   b. Smoking, excessive alcohol and caffeine intake.
   c. Low calcium diet
   d. Excessive intake of soft drinks. It is the phosphoric acid found in the colas that can inhibit the absorption of calcium.
   e. Lack of weight bearing exercise.

Looking at these risk factors you can see that there are many that you can't change but there are some that you can. You can see how the first couple of sessions we did can play a huge role in helping to prevent osteoporosis.

SHOW: RISK FACTORS



D. I strongly recommend that you ask your mothers and grandmothers when they went through menopause. This will help you have some idea when you might have menopause. Since the timing of menopause is somewhat determined genetically

D. However you can pass on to your mothers, and grandmothers that it is never to late to start to decrease the risk for osteoporosis. This can be done by increasing their calcium intake and exercise.

Outline of Instruction | **Instructor Activity**

III. PREVENTION

Prevention is the key to osteoporosis. The younger you are when you start preventive measures the better.

A. Calcium: You must make sure that you get the recommended amount of calcium in your diet.

1. Recommendations:
   - -18-50 yrs: 800 mg per day
   - -Pregnant or breast feeding moms:
   - under the age of 19 yrs: 1600 mg per day
   - over the age of 19 yrs : 1200 mg per day
   - -Women over 50 yrs: 1000-1500 mg

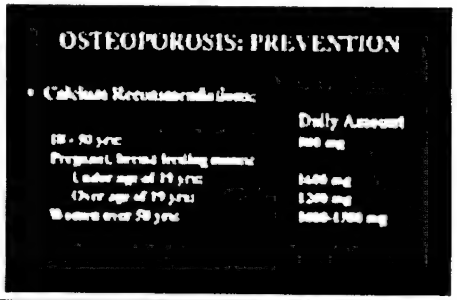
2. Sources of Calcium: The best sources of calcium are dairy products: 8 ozs of milk, 1.5 ozs of hard cheese, 1 cup of yogurt all have about 300 mgs of calcium.

3. Other Sources of Calcium:

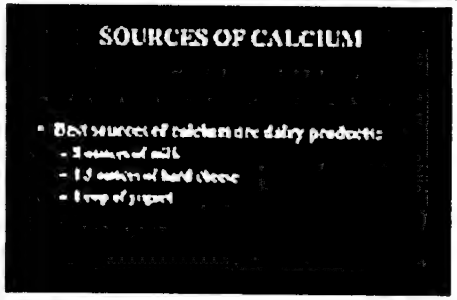
Broccoli cooked	1 cup	140 mg
Spinach cooked	1 cup	106 mg
Cabbage cooked	1 cup	64 mg
Okra cooked	1/2 cup	88 mg
Oranges	1 med	54 mg
Rhubarb	1 cup	212 mg
Sardines (canned, with bones)	3 1/2 ozs	370 mg
Salmon (canned, with bones)	3 1/2 ozs	200 mg

Q. What are some sources of calcium? WAIT FOR RESPONSE

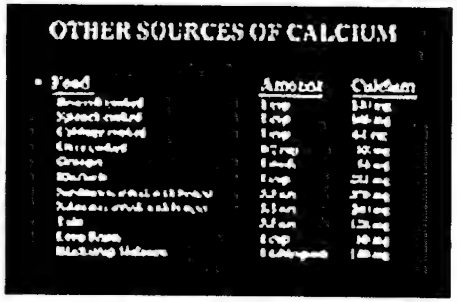
SHOW: PREVENTION CALCIUM



SHOW: SOURCES OF CALCIUM



SHOW: OTHER SOURCES OF CALCIUM



Outline of Instruction | **Instructor Activity**

Tofu	3 1/2 ozs	128 mg
Lima Beans	1 cup	80 mg
Blackstrap Molasses	1 tablespoon	140 mg

4. If you do not get enough calcium in your diet you should consider taking a supplement.

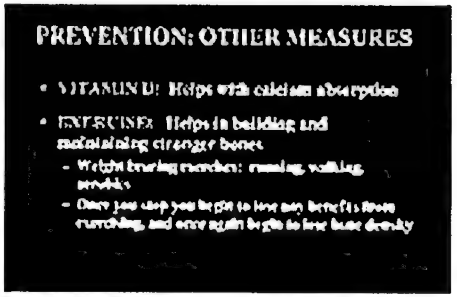
B. Other Measures

1. Vitamin D. You need vitamin D to help with the absorption of calcium. You manufacture this vitamin as a result of exposure to sunlight, and it is also found in milk products. Do not take supplements of vitamin D, as you can get too much of this vitamin.

2. Exercise. This is helpful in building and maintaining stronger bones. You want to do weight bearing exercises such as running, walking, aerobics. Also, muscle strength training is helpful. Swimming while good for your heart is not a weight bearing exercise.

a. Exercise is only helpful as long as you do it consistently. Once you stop, you begin to lose any benefits of increased bone density.

SHOW: OTHER MEASURES



FOOD WHIZ GAME

1. **What are the 2 ways you deplete your energy stores?**

2. **What are the 2 types of carbohydrates?**

3. **How do we lose water from our bodies?**

4. **What are the 3 of the seven dietary guidelines?**

5. **What is considered moderation when drinking alcohol for women and men?**

6. **What are the recommended servings per day for grain products?**

---

7. **Fats should be no more than what percentage of your total daily calories?**

---

8. **Cholesterol found in foods is only found in animal products. True or False**

---

9. **Why are carbohydrates important?**

---

10. **What are the 5 food groups on the food pyramid?**

11. What are the recommended number of servings from the milk, yogurt and cheese group?

---

12. What are the recommendations for keeping hydrated during exercise?

---

13. Muscles are more receptive to refueling 1 -2 hours after hard exercise (greater the 90 minutes)? True or False

---

14. A training diet should have what percentage of the total calories as carbohydrates?

---

15. What are the recommended number of servings for vegetables?

16. What is at the top of the food pyramid guide?

---

17. Cholesterol comes from plant products? **True or False**

---

18. How many serving per day should you have of meat, poultry, fish, dry beans, eggs, and nuts group?

APPENDIX D:

Questionnaire Evaluating Experimental Intervention, "Choices"

HEALTH SURVEY

Please answer each of the following questions. This sheet which contains your name will be kept separately from the survey.

The information you provide is strictly confidential which means that it will not be shared with anyone. There are no right or wrong answers so please answer each and every question as honestly as you can. Your answers will not be used to identify you as an individual but will be grouped with other answers to help us provide better educational programs to other military personnel in the future.

NAME: (Please Print) _____ _____
(Last Name) (First Name)

SOCIAL SECURITY NUMBER: ___ ___ ___ ___ ___ ___ ___ ___ ___

1. What is your age? ____ years old

2. What is your race or ethnic background? **(circle one)**

   A. Native American/American Indian
   B. Asian/Pacific Islander/Filipino
   C. African American/Black
   D. Hispanic/Latino
   E. White/Caucasian
   F. Other _____

3. What is your current marital status? **(circle one)**

   A. Single/Never Married
   B. Married/Living as Married
   C. Separated/Divorced

4. What level of education did you complete? **(circle one)**

School	Number of Years Attended
A. High School/GED	**1 2 3 4**
B. Vocational/Technical	**1 2 3 4**
C. College/University	**1 2 3 4**

For all the following questions please circle one answer for each question.

Strongly Agree	*Agree Somewhat*	*Neither Agree Nor Disagree*	*Disagree Somewhat*	*Strongly Disagree*
1	*2*	*3*	*4*	*5*

- ***STDs = sexually transmitted diseases***
- ***PID = pelvic inflammatory diseases***
- ***HIV = human immunodefiency virus***

5. Safe-sex includes activities such as hugging, body massages, and slow dancing. **1 2 3 4 5**

6. Getting an STD such as chlamydia increases a person's risk of getting HIV. **1 2 3 4 5**

7. Condoms called "natural skins" are recommended because they prevent the transmission of HIV and other STDs. **1 2 3 4 5**

8. With safer-sexual activities there is the possibility that bodily fluids such as blood, semen, or vaginal secretions can be exchanged. **1 2 3 4 5**

9. Some STDs, such as syphilis and herpes can be transmitted by exposure to open sores on the lips or tongue when kissing. **1 2 3 4 5**

10. STDs, including HIV, can be transmitted through ear piercing and tattooing. **1 2 3 4 5**

Strongly Agree 1	*Agree Somewhat* 2	*Neither Agree Nor Disagree* 3	*Disagree Somewhat* 4	*Strongly Disagree* 5

11. A woman's vagina and cervix are covered by a lining of cells that are thin and fragile which makes women more susceptible than men to become infected with STDs, including HIV. **1 2 3 4 5**

12. Using condoms during sex gives a woman complete protection against STDs such as genital warts and herpes. **1 2 3 4 5**

13. HIV can be transmitted though "dry kissing" without the exchange of saliva. **1 2 3 4 5**

14. Latex condoms used with lubricants such as Vaseline and baby oil is the best method for preventing STDs, including HIV infection . **1 2 3 4 5**

15. Women with HIV can give it to their babies through breast milk. **1 2 3 4 5**

16. Withdrawal of the penis before the man ejaculates prevents STDs, including HIV. **1 2 3 4 5**

17. Having an HIV test done two weeks after having sex can tell you whether you have HIV. **1 2 3 4 5**

18. STDs can be passed from a woman to her baby during birth, even if she does not have symptoms. **1 2 3 4 5**

19. I really only need to use condoms during "one night stands". **1 2 3 4 5**

20. I can really tell whether a potential sex partner is at risk for HIV by how he dresses and how he looks. **1 2 3 4 5**

21. When I feel that I have gotten to know someone very well, you no longer need to practice safer sex with them. **1 2 3 4 5**

22. Asking my partner about his sexual history is a good way to find out whether or not to practice safer sex with him. **1 2 3 4 5**

23. As long as a person does not belong to a "high-risk" group such as gays or drug users, I really don't need to worry about getting HIV from them. **1 2 3 4 5**

24. If my partner and I have sex only with each other, I really do not have to use condoms. **1 2 3 4 5**

25. When having sex with someone in the military, I do not have to use condoms, but when having sex with someone who is not in the military, I should definitely use condoms. **1 2 3 4 5**

26. A person can be infected with HIV for five or more years without developing AIDS. **1 2 3 4 5**

27. A woman with an STD always has symptoms. **1 2 3 4 5**

28. The human papillomavirus (warts) can lead to cervical cancer. **1 2 3 4 5**

Strongly Agree 1	*Agree Somewhat* 2	*Neither Agree Nor Disagree* 3	*Disagree Somewhat* 4	*Strongly Disagree* 5

29. If a woman's Fallopian tubes are blocked from scars from PID, the fertilized egg can get stuck causing an ectopic pregnancy (a pregnancy in the tubes).	**1**	**2**	**3**	**4**	**5**
30. The female condom is a pouch with an internal ring that covers the cervix and has an external ring over the vaginal opening to catch sperm and other secretions.	**1**	**2**	**3**	**4**	**5**
31. Women with particular STDs such as syphilis, herpes, or warts may have rashes, blisters, ulcers, sores, or lumps around the vagina, anus, or mouth.	**1**	**2**	**3**	**4**	**5**
32. PID is an infection of the uterus, ovaries, and Fallopian tubes.	**1**	**2**	**3**	**4**	**5**
33. Viral STDs such as genital herpes and warts can be treated to make some of the symptoms improve, but there are no cures.	**1**	**2**	**3**	**4**	**5**
34. If a woman has scaring or blockage in her Fallopian tubes from previous episodes of PID, she may become sterile, which means she will not be able to have babies.	**1**	**2**	**3**	**4**	**5**
35. Some STDs can harm the brains of unborn babies, causing mental retardation.	**1**	**2**	**3**	**4**	**5**
36. Some STDs such as chlamydia and gonorrhea can not be cured with antibiotics.	**1**	**2**	**3**	**4**	**5**
37. Chronic and recurrent yeast infections that do not respond to medication are often one of the first signs of HIV infection in women.	**1**	**2**	**3**	**4**	**5**
38. Sperm can live up to 72 hours once inside a woman's reproductive tract.	**1**	**2**	**3**	**4**	**5**
39. Birth control pills are 99% effective, if taken correctly.	**1**	**2**	**3**	**4**	**5**
40. Depo-Provera is a method of birth control that consists of a female hormone that is injected into the woman every three months.	**1**	**2**	**3**	**4**	**5**
41. The Norplant method of birth control is effective for only a year.	**1**	**2**	**3**	**4**	**5**
42. Withdrawal of the penis before a man ejaculates is an effective way to prevent pregnancy.	**1**	**2**	**3**	**4**	**5**
43. A 12-ounce beer, a 4-5 ounce glass of wine, and 1 ½-ounce shot of whiskey all have the same amount of alcohol.	**1**	**2**	**3**	**4**	**5**
44. A person who is dehydrated can become drunk more easily than a person who drank lots of fluids like water and juice.	**1**	**2**	**3**	**4**	**5**
45. Alcohol will have the same effect on a woman and a man who weigh the same and who drink the same amount of alcohol.	**1**	**2**	**3**	**4**	**5**
46. A hungry person will become drunk more easily than a person who has just had a full meal.	**1**	**2**	**3**	**4**	**5**

Strongly Agree 1	*Agree Somewhat* 2	*Neither Agree Nor Disagree* 3	*Disagree Somewhat* 4	*Strongly Disagree* 5

47. A woman's menstrual cycle influences how alcohol affects her. **1 2 3 4 5**

48. Women who drink alcohol during pregnancy may have babies with birth defects such as mental retardation and abnormal facial development. **1 2 3 4 5**

The following questions ask for your thoughts about <u>not</u> having sexual intercourse <u>at all</u> during your first six months in the Corps. We are referring the <u>times in which you are on leave, at Service School, and at your first Duty Station, not during the times you are in training</u>.

- ***Please circle one answer that best describes your feelings about the question.***
- ***For purposes of this questionnaire sex refers to sexual intercourse, that is, putting a penis into a vagina or rectum (behind).***
- ***Friends refer to individuals who are a part of your social group and whose opinions are important to you.***

49. Not having sex at all during my first six months in the Corps, would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

50. My friends think that it is important for me to not have sex at all during my first six months in the Corps.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

51. I am planning to **not** have sex at all during my first six months in the Corps.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next section of the questionnaire has to do with preventing an unplanned pregnancy. Many of these questions ask you to describe your feelings about behaviors that involve a sexual partner. If you do not have a sexual partner back home or have never had sex, please answer the questions as if you do have a sexual partner.

The following questions are about <u>talking</u> to a sexual partner about using a method of birth control to prevent pregnancy before having sex.

52. Talking to my sexual partner about using a method of birth control before having sex would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

53. My friends think that it would be important for me to talk to my sexual partner about using a method of birth control before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

54. I plan to talk to my sexual partner about using a method of birth control before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions is about <u>using</u> a method of birth control to prevent pregnancy before having sex.

55. Using a method of birth control to prevent pregnancy before having sex would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

56. My friends think that it is important for me to use a method of birth control to prevent pregnancy before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

57. I plan to use a method of birth control to prevent pregnancy before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions asks about <u>going to the Command's Medical Clinical or Hospital</u> during your first six months in the Corps to discuss choosing a method of birth control that is right for you.

58. Going to Medical during my first six months in the Corps to discuss choosing a method of birth control that is right for me would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

59. My friends think that it is important for me to go to Medical during my first six months in the Corps to discuss choosing a method of birth control that is right for me.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

60. I plan to go to Medical during my first six months in the Corps to discuss choosing a method of birth control that is right for me.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

This part of the questionnaire has to do with preventing STDs, including HIV. Again, answer all questions even if you do have a sexual partner back home or have never been involved in a sexual relationship.

The following questions is about talking to a sexual partner about practicing only safer-sex (such as using latex condoms) before having sex.

61. Talking to my sexual partner about using a latex condom before having sex would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

62. My friends think that it is important for me to talk to my sexual partner about using a latex condom before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

63. I plan to talk to my sexual partner about using a latex condom before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions asks about buying latex condoms or getting them free from Medical before having sex.

64. Buying latex condoms or getting them from Medical before having sex would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

65. My friends think that it is important for me to buy latex condoms or get them from Medical before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

66. I plan to buy latex condoms or get them from Medical before having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions is about practicing safer-sex such as using latex condoms consistently and correctly when having sex.

67. Using a latex condom consistently and correctly when having sex would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

68. My friends think that it is important for me to use a latex condom consistently and correctly when having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

69. I plan to use a latex condom consistently and correctly when having sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions refers to getting checked for STD infections if you engage in unsafe sex such as not using a latex condom when having sex (even if you do not have symptoms).

70. If I engage in unsafe sex, going to Medical or another health clinic to be checked for STD infections would be:

Very Good	Somewhat Good	Neither Good Nor Bad	Somewhat Bad	Very Bad

71. My friends think that it is important for me to go to Medical or another health clinic to be checked for STD infections if I engage in unsafe sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

72. I plan to go to Medical or another health clinic to be checked for STD infections if I engage in unsafe sex.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

The next group of questions asks about your chances of becoming pregnant or getting an STD during your first six months in the Corps. Remember, we realize that you will not socialize with men during Recruit Training and MCT, but we are thinking about the times in which you will be on leave, at Service School, and at your first Duty Station.

73. What do you think the chances are that you will become pregnant during your first six months in the Corps?

No Chance	Very Low Chance	Low Chance	Moderate Chance	High Chance

74. What do you think the chances are that a typical woman in your platoon will become pregnant during her first six months in the Corps?

No Chance	Very Low Chance	Low Chance	Moderate Chance	High Chance

75. Compared to other women in your platoon, would you say that your chance of becoming pregnant during your first six months in the Corps is:

Much lower than other women in my platoon	Lower than other women	About the same as other women	Higher than other women	Much higher than other women in my platoon

76. With regard to your chances of getting pregnant, would you say your sexual behavior is:

Very Safe Fairly Safe Somewhat Risky Very Risky

77. I think my chance of becoming pregnant during my first six months in the Corps is about:

0% 1% 5% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

78. What do you think your chances are of getting an STD during your first six months in the Corps?

No Chance	Very Low Chance	Low Chance	Moderate Chance	High Chance

79. What do you think the chances are that a typical woman in your platoon will get an STD during her first six months in the Corps?

No Chance	Very Low Chance	Low Chance	Moderate Chance	High Chance

80. Compared to other women in your platoon, would you say that your chance of getting an STD during your first six months in the Corps is:

Much lower than other women in my platoon	Lower than other women	About the same as other women	Higher than other women	Much higher than other women in my platoon

81. With regard to your chances of getting an STD, would you say your sexual behavior is:

Very Safe Fairly Safe Somewhat Risky Very Risky

82. I think my chance of getting an STD during my first six months in the Corps is about:

0% 1% 5% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

These questions have to do with your attitudes about using condoms. Please answer all questions even if you have never had sexual intercourse or have never used condoms.

83. I don't like sex with condoms.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

84. Women who only have sex when their sexual partner uses condoms are very responsible.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

85. Condoms decrease the feeling during sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

86. Having my sexual partner put on a condom during sex spoils the mood.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

87. I enjoy sex more when my partner uses condoms.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

These questions have to do with your feelings about drinking alcohol. If you do not drink alcohol answer each question according to what you <u>think might</u> be true.

88. I am more likely to have sex with someone I do not know very well after I have had a few drinks.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

89. I enjoy sex more after I have had a few drinks of alcohol.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

90. I refuse to have sex if I have been drinking alcohol.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

91. I am more likely to have sex without condoms after I have had a few drinks of alcohol.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

This group of questions is about the degree to which you think the following methods of birth of control prevent pregnancy and STDs. For each method please indicate how effective you think they are for pregnancy prevention and for STD prevention.

92. How effective are condoms for preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

93. How effective are condoms in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

94. How effective are birth control pills in preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

95. How effective are birth control pills in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat. Ineffective	Totally Ineffective

96. How effective is Depo-Provera in preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

97. How effective is Depo-Provera in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

98. How effective is Norplant in preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

99. How effective is Norplant in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

100. How effective is Spermicide in preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

101. How effective is Spermicide in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

102. How effective is withdrawal of the penis before ejaculation occurs in preventing pregnancy?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

103. How effective is withdrawal of the penis before ejaculation occurs in preventing STDs?

Very Effective	Somewhat Effective	Neither Effective Nor Ineffective	Somewhat Ineffective	Totally Ineffective

This section of the questionnaire is interested in finding out how difficult it would be for you to do the following activities to prevent pregnancy.

Remember if you are not in a sexual relationship, or do not plan to be in one, answer each question as if you are involved in a sexual relationship.

104. How difficult would it be for you to not have sex at all during your first six months in the Corps?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

105. How difficult would it be talk to a sexual partner about using a method of birth control before having sex?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

106. How difficult would it be for you to always use a method of birth control to prevent pregnancy before having sex?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

107. How difficult would it be for you to go to Medical during your first six months in the Corps to discuss choosing a method of birth control that is right for you?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

This group of questions asks how difficult it would be for you to do the following activities to avoid STDs.

108. How difficult would it be for you to talk to a sexual partner about using a latex condom before having sex?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

109. How difficult would it be for you to buy latex condoms or get them from Medical before having sex?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

110. How difficult would it be for you to use a latex condom consistently and correctly when having sex?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

111. How difficult would it be for you to go to Medical or some other health clinic to get checked for STD infections if you had sex without using condoms?

Very Difficult	Somewhat Difficult	Neither Difficult Nor Easy	Somewhat Easy	Very Easy

The following questions are about how confident you feel you can do the following behaviors. Confident means being sure about your ability to do something.

112. I am confident in my ability to not to have sex at all during my first six months in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

113. I am confident that I can talk to my sexual partner about using a method of birth control before having sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

114. I am confident that I can use a method of birth control to prevent pregnancy before having sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

115. I am confident that I can go to Medical during my first six months in the Corps to discuss choosing a method of birth control that is right for me.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

116. I am confident that I can talk to my sexual partner about using a latex condom before having sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

117. I am confident that I can buy latex condoms or get them from Medical before having sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

118. I am confident that I can use a latex condom consistently and correctly when having sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

119. I am confident that I can go to Medical or another health clinic to be checked for STD infections if I engage in unsafe sex.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

120. Which of the following fits your own thoughts best: **(circle only one)**

A. I need to use condoms more often.

B. I don't need to change what I do now.

C. I could use condoms less often that I do now.

121. Which of the following fits your own thoughts best: **(circle only one)**

A. I need to be more careful about who becomes my sexual partner

B. I don't need to change what I do now.

C. I could be less careful about my choices of partners.

Read the following story and answer each question as if you were the woman in the story and your goal is to make a healthy decision to protect yourself from having an unplanned pregnancy or getting STDs.

Imagine that you are in the beginning weeks of a new relationship with a guy name Mike. You really like him, and you think that your relationship has the potential to develop into something special. You want it to be different than with your other boyfriends. You've promised yourself that in any new relationship you will start out by being open and honest about sex, birth control, and protection against STDs before getting too involved. But, you also realize that beginning the conversation is difficult and a little scary. You don't want him to think that you do not trust him or that your reason for wanting to talk about these things is because you have some kind of disease.

122. What do you say? What are important things to bring up in your discussion?

A. _____

B. _____

C. _____

D. _____

123. After talking to Mike, he becomes a little upset. How do you respond if he tells you the following things?

A. "Talking spoils the mood, sex should just be natural."

B. "You will not catch anything from me, what kind of guy do think I am?"

C. "I'll make sure you don't get pregnant."

D. "Condoms don't feel good."

The following set of questions is about activities that you may or may not have done before. There are no right or wrong answers to these questions, so please answer each question.

REMEMBER: sex = sexual intercourse – a penis in the vagina or rectum (behind).

124. Have you **ever** had sex?

Yes, I have had sex No, I have **never** had sex

125. At what age did you have sexual intercourse for the very first time? _____ age

126. How many different people have **ever** you had sexual intercourse with? _____ different people

127. Of the people you **ever** had sex with, how many of them would consider steady partners and how many would you consider casual partners?

(A steady partner is someone you knew for a while and had an ongoing relationship with and a casual partner is someone you knew for a short period of time with whom you did not have an ongoing relationship).

_____ number of steady partners _____ number of casual partners

128. Have you **ever** been pregnant?

Yes, _____ times No

129. Have you **ever** been told by a nurse or doctor that you had an STD?

Yes, _____ times No

130. In general, how often do you use a method of birth control to prevent pregnancy?

Always Usually Sometimes Almost Never Never Does not apply, I have never had sex

131. In general, what percentage of the time do you use a latex condom when having sex?

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Does not apply, I have never had sex

132. What do you **usually** use when having sex? **(circle as many as necessary)**

A. Does not apply to me I have never had sex

B. No Method

C. Birth Control Pills

D. Depo-Provera or Norplant

E. Condoms with spermicide

F. Only Condoms

G. Spermicide Alone

H. Withdrawal or Rhythm Method

The next group of questions are about the past three months only (prior to Recruit Training)

133. Did you have sexual intercourse in the past three months?

Yes No

134. How many different people did you have sex with in the past three months? _____ different people

135. Of the people you had sex with in the past three months, how many of them would you consider steady partners and how many would you consider casual partners?

_____ number of steady partners _____ number of casual partners

136. Indicate the age of each of your sexual partners and the percentage of time you used condoms with each partner in the past three months? **(Use the range of 0% --- 100%)**

____ Does not apply to me, I did not have sex in the previous three months.

	Steady Partners		***Casual Partners***	
	Age	***% of Condom Use***	***Age***	***% of Condom Use***
A.	____	_____	____	_____
B.	____	_____	____	_____
C.	____	_____	____	_____
D.	____	_____	____	_____

137. Did you talk to your sexual partner(s) about using a method of birth control to prevent pregnancy in the past three months?

Yes, all of my sex partners	Yes, some of my sex partners	No, none of sex partners	Does not apply, I did not have sex in the past three months.

138. Did you talk to a sexual partner about using a latex condom in the past three months?

Yes, all of my sex partners	Yes, some of my sex partners	No, none of sex partners	Does not apply, I did not have sex in the past three months.

139. Did you buy latex condoms or get them free from a health clinic when you needed them in the past three months?

Yes, always	Yes, some of the time	No, never	Does not apply, I did not have sex in the past three months

140. Did you go to a health clinic to discuss choosing a method of birth control that is right for you in the past three months?

Yes	No	Does not apply, I did not have sex in the past three months

141. How often did you use a method of birth control to prevent pregnancy in the past three months?

Always	Usually	Sometimes	Almost Never	Never	Does not apply, I did not have sex in the past three months

142. How often did you use a latex condom when having sex in the past three months?

Always	More than half the time	About half the time	Less than half the time	Never	Does not apply, I did not have sex in the past three months

143. Did you go to a health clinic to get checked for STD infections, even if you had no symptoms in the past three months?

Yes	No	Does not apply, I did not have sex in the past three months

144. How often did you have sex after drinking alcohol or use any other type of substances in the past three months?

Always	Usually	Sometimes	Almost Never	Never	Does not apply, I did not have sex in the past three months

145. Of your sexual partners in the past three months, do you know if they had sex with someone other than yourself?

Yes	Not sure, but possible	No	Does not apply, I did not have sex in the past three months

146. Of your sexual partners in the past three months, do you know if they had an STD during that time?

Yes	Not sure, but possible	No	Does not apply, I did not have sex in the past three months

147. What have you done in the past three months to **reduce** your risk of pregnancy and STDs? **(circle as many as necessary)**

A. Did not have sex

B. Reduce my number of sexual partners

C. Used birth control pills or other hormonal methods such as Depo-Provera or Norplant?

D. Used condoms with or without Spermicide

E. Refused sex if condoms were not going to

F. Only had sex with steady boyfriend be used

G. Used Spermicide with no other method

H. Withdrawal or Rhythm Method

I. Asked my new sexual partner about his sexual history first

J. Did not have sex after drinking alcohol or using some other drug.

K. Said no to sex

L. Other _____

148. What have you done in the past three months that **increased** your risk for pregnancy and STDs?

A. Had more than one sexual partner

B. Did not use birth control pills or other hormonal methods such as Depo-Provera or Norplant with each sexual encounter

C. Did not use condoms with each sexual encounter

D. Did not use spermicide during each sexual encounter

E. Used only withdrawal or rhythm method

F. Had sex after drinking alcohol or using some other substance.

G. Used no method of protection

H. Does not apply to me I did not have sex in the previous three months.

I. Other _____

The next few questions ask about the very last time you had sex.

149. Think back to the **last time** you had sex, what did you use to prevent pregnancy or STDs? **(circle as many as necessary)**

A. Does not apply to me I did not have sex

B. No Method

C. Birth Control Pills

G. Depo-Provera or Norplant

D. Condoms with Spermicide

E. Only Condoms

F. Spermicide Alone

H. Withdrawal or Rhythm Method

150. Do you consider your last sexual partner to be a steady partner (someone you knew for a while and had an ongoing relationship with) or a casual partner (someone you knew for a short period of time and did not have an ongoing relationship with)? **(circle one)**

Steady Casual Does not apply to me, I have never had sex

151. What was the age and race/ethnicity of your last sexual partner?

_____ age _____ race/ethnicity Does not apply to me, I have never had sex

152. How often did you use any of the following in the **month** before coming to Recruit Training?

A. Alcohol (Beer, Wine, Wine Coolers, Hard Liquor)

Never A Few Times A Few Times Month Once or Twice A Week Everyday

B. Drugs (Marijuana, Crack, Cocaine, Speed, etc.)

Never A Few Times A Few Times Month Once or Twice A Week Everyday

153. We are interested in how much alcohol you typically drink on any given occasion. By one drink, we mean one 12 ounce bottle of beer, one shot of liquor (straight or in a mixed drink), or a 4 ounce glass of wine. Think of all the times drank alcohol in the **month** before coming to Recruit Training.

A. When you drank, how often did you have as many as 5 or 6 drinks?

Nearly Every Time	More than Half the Time	Less than Half of the Time	Once in a While	Never

B. When you drank, how often did you have as many as 3 or 4 drinks?

Nearly Every Time	More than Half the Time	Less than Half of the Time	Once in a While	Never

C. When you drank, how often did you have as many as 1 or 2 drinks?

Nearly Every Time	More than Half the Time	Less than Half of the Time	Once in a While	Never

APPENDIX E:

Questionnaire Evaluating Control Intervention, "Fitness for Life"

NUTRITION AND FITNESS HEALTH SURVEY

Please answer each of the following questions. This sheet which contains your name will be kept separately from the survey.

The information you provide is strictly confidential which means that it will not be shared with anyone. There are no right or wrong answers so please answer each and every question as honestly as you can. Your answers will not be used to identify you as an individual but will be grouped with other answers to help us provide better educational programs to other military personnel in the future.

NAME: (Please Print) _____ _____
(Last Name) (First Name)

SOCIAL SECURITY NUMBER: ___ ___ ___ ___ ___ ___ ___ ___ ___

Nutrition and Fitness Survey

The following are questions about nutrition and fitness. Circle one answer for each question.

1. Cholesterol comes from plant products.

   True False

2. Fats should make up ***no more*** than what percentage of your total daily calorie intake?

   less than 5% 15% 30% 50%

3. How does the food pyramid help you eat a healthier diet?

   A. It tells you exactly what calories are in a particular food.

   B. It helps you to decide what amount of alcohol intake is safe for you.

   C. It shows the how we need to eat a mixture of foods like fruits, meats and grains to be healthy.

   D. It tells you how much exercise you have to do to lose weight.

4. The label "low fat" on a food package always means low in calories.

   True False

5. The "percent Daily Value" that is printed on the label of a packaged food is helpful in:

   A. figuring out the number of calories that is right for you to eat each day.

   B. comparing the fat or calories in different foods when shopping or choosing what to eat.

   C. calculating the amount of fat you should eat each day.

6. Which of the following statements is TRUE?

   A. Healthy eating decreases your risk for developing chronic diseases such as heart disease and osteoporosis when you are older.

   B. Healthy eating does not have much effect on your weight since weight is mostly determined by your family history.

   C. It doesn't matter how you eat when you are young because you can always eat healthy when you get older.

7. It is impossible to eat healthy at the Mess Hall.

   True False

8. The best sources of calcium are dairy products such as milk and yogurt.

True False

9. An important element (s) to fitness is:

A. good nutrition

B. getting enough sleep

C. getting enough exercise

D. all of the above

10. The minimum amount of exercise the average adult should do every week is:

A. intense aerobic exercise for 15 minutes daily for 7 days a week

B. moderate aerobic exercise for 30 minutes daily for 5-7 days a week

C. intense aerobic exercise for 60 minutes daily for 5 days a week

D. moderate muscle building exercise using weights for 60 minutes a day for 5-7 days a week.

11. Speed is the primary factor in developing cardiovascular endurance.

True False

12. Aerobic exercise includes all of the following *except*:

A. jogging

B. dancing class

C. biking

D. weight training

13. What is a key element of a good fitness program?

A. cardiovascular training

B. doing 50 stomach crunches

C. maintaining your weight

D. exercising until you reach your absolute limit of endurance

14. R.I.C.E. refers to which of the following:

A. the 4 food groups in the food pyramid

B. the activities that need to be done after a minor injury occurs during training and exercise

C. eating rice as an important source of carbohydrates in a healthy meal

D. the key elements in a balanced fitness program

15. The required steps to prevent injury when doing personal fitness training should be done in which order?

A. warm-up and cool-down

B. stretch, warm-up, exercise, and cool-down

C. exercise, cool-down

D. stretch, exercise, warm-up, cool-down

16. Detraining (the loss of fitness after training has completely stopped) occurs within what amount of time?

A. within 5 days

B. within one month

C. within 2 weeks

D. within 3 months

17. Stress fractures among women Marines are caused mainly by:

A. over-use and over-training

B. fulfilling the Marine fitness requirements developed for males.

C. not warming-up properly

D. poor nutrition

18. An over-use injury that causes inflammation of the muscles and tendons of the lower leg is called:

A. shin splints

B. Osgood-Schlatter's

C. Charlie horse

D. sprain

19. The Marine Corps fitness evaluation estimates the percentage of body fat by which measurement?

A. weight for age

B. the amount of fat in your diet

C. weight to height ratio

D. weight for gender

20. To gain one additional pound of body weight, I would have to eat this number of calories above my normal daily need:

A. 500 calories

B. 1500 calories

C. 3500 calories

D. 6000 calories

21. The Marine Corps fitness regulations require that a woman does not exceed this percentage of body fat to pass the fitness evaluation?
A. 10% B. 45% C. 26% D. 100%

22. Young healthy women do not have to be concerned about preventing osteoporosis until they over 40.
True False

23. Very low body weight protects a woman from osteoporosis.
True False

24. Smoking, excessive alcohol and caffeine intake place a woman at risk for developing osteoporosis.
True False

25. One good way to protect yourself from developing osteoporosis is to continue weight bearing exercises throughout life like exercise walking and jogging.
True False

The following questions ask for your thoughts about nutrition and fitness.
Please circle one answer that best describes your feelings about the question.

26. I am concerned about what I eat.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

27. I am worried about building up muscle like a man during training in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

28. I don't need to worry about maintaining my weight to pass the fitness evaluation because I can always lose a few pounds in a few days.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

29. Worrying about osteoporosis now is not important because it doesn't affect people my age.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

30. I am happy with my current weight.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

31. Most people my age think that it is important to eat healthy foods.

Very True	Somewhat True	Neither True Nor Untrue	Somewhat Untrue	Very Untrue

32. Most people my age think that it is important to maintain a balanced personal fitness training program.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

33. Most people my age think that it is important to avoid "weight cycling" (rapidly losing and gaining weight).

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

34. I will avoid eating junk food during my first six months in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

35. I will avoid going on a crash diet to maintain a healthy weight during my first six months in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

36. I am planning to develop a personal fitness training program after I am done with recruit training and Marine Combat Training (MCT).

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

37. I am planning to maintain a healthy weight by good nutrition and personal fitness training.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

38. I am confident (sure) that I can eat healthy foods during my first six months in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

39. I am confident that I can prevent injuries during my personal fitness training.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

40. I am confident that I can maintain a healthy weight during my first six months in the Corps.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

41. I am confident that I can protect myself from developing osteoporosis when I am older by eating healthy while I am young.

Strongly Agree	Agree Somewhat	Neither Agree Nor Disagree	Disagree Somewhat	Strongly Disagree

The following are questions about your eating habits.

42. How many glasses of milk did you drink or yogurts (regular or frozen) did you eat yesterday?

1 or less 2-3 4 or more

43. How many times did you eat cheese yesterday (this includes cheese in or on foods like pizza or macaroni and cheese, sandwiches)?

1 or less 2-3 4 or more

44. How many times did you eat protein type foods like meat, chicken or fish, eggs or cooked beans yesterday?

1 or less 2-3 4 or more

45. How many times did you eat fresh, frozen or canned fruit yesterday?

1 or less 2-3 4 or more

46. How many times did you eat fresh, frozen or canned vegetables yesterday?

1 or less 2-3 4 or more

47. How many glasses of fruit or vegetable juice (not punch) did you drink yesterday?

1 or less 2-3 4 or more

48. How many times did you eat fried foods, desserts, fast food, snacks like chips yesterday?

1 or less 2-3 4 or more

The following questions refer to your weight and how you try to control your weight.

49. Do you skip a meal 3 or more times a week?

Yes No

50. Have you ever been on a diet now or have you limited your food intake to lose weight?

Yes No

51. Have you ever taken diet pills, water pills, or laxatives to lose weight?

Yes No

52. Have you ever vomited to lose weight?

Yes No

53. Have you ever eaten so much in a short period of time that you felt out of control and would be embarrassed if others saw you?

Yes No

54. Before you joined the Marine Corps, have you ever lost so much weight or exercised so much that your menstrual periods stopped for more than 3 months in a row when you weren't pregnant?

Yes No

55. My current weight in pounds is _____ pounds.

56. My height is: _____ feet and _____ inches.

APPENDIX F:

Updated Informed Consent Statement

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO AND
NAVY HEALTH RESEARCH CENTER, SAN DIEGO
CONSENT TO BE A RESEARCH SUBJECT
Intervention to Prevent Disease and Promote Health among Marine Women

A. PURPOSE AND BACKGROUND

Drs. Cherrie Boyer and Mary-Ann Shafer, University of California, San Francisco and CMDR Richard Shaffer and CAPT(ret) Stephanie Brodine, Navy Health Research Center, San Diego are conducting a research study to help young women Marines avoid acquiring sexually transmitted diseases and prevent unintended pregnancies. This study is being funded by the Department of Defense as a part of the Women's Health Initiative. I am being asked to participate because I am a young healthy woman Marine recruit.

B. PROCEDURES

If I agree to participate, the following will occur:

1. I will be randomly assigned to participate in either of two different programs:

(a) a program called *CHOICES* to help me prevent acquiring a sexually transmitted disease and having an unintended pregnancy

OR

(b) a program called *FITNESS FOR LIFE* to help me stay healthy through learning about good nutrition and proper exercising and fitness techniques. I have a fifty-fifty chance of being in either group for the duration of the study.

2. I will complete a questionnaire at the beginning, 5-6 weeks later during my time at Marine Combat Training School (MCT), and at the end of the project (6 months later). I may also be asked to fill out a questionnaire 12 months after the project is finished. The questionnaire will ask me about my general health, nutrition and fitness and about my sexual practices, contraceptive use and alcohol use. I can refuse to answer any question. The questionnaires are confidential, that is my name will not be used on the questionnaires, only a code number known to the researchers will be used to protect my privacy. The information I give on the questionnaires will not become part of my military record (See confidentiality discussion under the Risks and Discomforts section below). The questionnaires will take a total of 30 minutes to complete each time.

3. I will participate in an educational program consisting of four sessions for two hours each session which will occur during my recruit training. The sessions will include some educational video tapes, educational talks with slides, interactive activities done in small groups of women in my platoon to learn skills about staying healthy. If I am assigned to the *CHOICES* group, I will learn how to avoid getting STDs, how to prevent having an unintended pregnancy and when to go to Medical to get checked if I

am concerned about an STD or possible pregnancy. If I am in the *FITNESS FOR LIFE* group I will learn how to prevent minor sports injuries while training and how to choose foods, how to decrease stress, and how to eat properly to maintain my health and weight.

4. I will provide a urine sample that will be tested for common STDs (chlamydia and gonorrhea) and for pregnancy. I will also collect some secretions using two simple swabs that I will insert into my vagina like I would a tampon. These swabs will be used to test for chlamydia and gonorrhea and also for another common STD, trichomonas. Results from these screening tests will become part of my permanent military record only if I require medical treatment for an infection. Otherwise all test results will be confidential and will be kept separate in a locked research file. The same sample for STD and pregnancy screening tests will also be repeated each time the questionnaires are administered, that is, at 5-6 weeks, in 6 months and at 12 months.

5. I may be asked to have an extra tube of blood drawn when I am having already required blood tests done during my intake recruit physical exam. This blood will be sent to the researchers' lab to screen for other STDs like hepatitis, wart virus and chlamydia.

6. The researchers may also need to review my medical chart during the study to check on any visits I may make to the Health Clinic for any woman's health care issues.

C. RISKS AND DISCOMFORTS

1. There are no risks to my giving a urine sample for STD and pregnancy testing. There are no additional risks to me by having an extra tube of blood collected since I already am having my blood drawn for necessary tests required by the Marines.

2. Some of the questions in the questionnaire may make me uncomfortable and I know that I can refuse to answer <u>any</u> question. In addition, some of the sensitive materials discussed about STDs or pregnancy during the educational sessions may make me feel uncomfortable and I can refuse to participate in <u>any</u> part of the program at any time.

3. Confidentiality during the study will be ensured by a pre-coded number identifier which will be attached to my questionnaire, my urine sample and my blood sample. My name and social security number will not be on any laboratory test items or on any of my questionnaires. This is to make sure that individuals working with the data will not know who is involved in the study. The confidentiality of the information related to by participation in this research will be ensured by the ADP security methods, that is, all names and social security numbers will be locked and kept in the Principal Investigator's office (Dr. Shafer) at the University of California, San Francisco. Upon completion of the data analyses, all identifying information sheets will be destroyed.

4. However, even with these safeguards, participation in research has the possibility loss of privacy. My records will be kept as confidential as is possible under the law.

BENEFITS

1. If I am in the STD and unintended pregnancy prevention program, CHOICES, the main benefit to me is learning about the risks and how to prevent STDs and an unintended pregnancy by gaining knowledge and learning skills related to communication and decision making about my behavior that will help me prevent problems.

2. If I am in the nutrition and fitness promotion program, FITNESS FOR LIFE, the main benefit to me is learning about the risks of poor eating and exercise habits and how to maximize healthy eating and prevent injuries related to exercise.

3. In addition, no matter which intervention group I am assigned, I may find out that I have a STD (sexually transmitted disease) that I didn't know I had or that I am pregnant when I did not think that I was from the testing of my urine in the laboratory.

E. COSTS

There will be no costs to me as a result of taking part in this study.

F. PAYMENT

There is no compensation for my participation.

G. QUESTIONS

I have talked with Dr. Cherrie Boyer or Dr. Mary-Ann Shafer or their designated person who signed below about this study and have had all of my questions answered. If I have any further questions, I may call Drs. Boyer and Shafer at 415-476-2184 or the on-base designated contact person _____ at _____.

If I have any comments or concerns about participation in this study, I should first talk with the researchers. If for some reason, I do not wish to do this, I may contact the Committee on Human Research, which is concerned with the protection of volunteers in research projects. I may reach the committee office between 0800 and 1700 California time Monday through Friday by calling 415-476-1814, or by writing: Committee on Human Research, Box 0962, University of California, San Francisco, San Francisco, CA 94143.

H. CONSENT

I will be given a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status as a Marine.

If you agree to participate you should sign below.

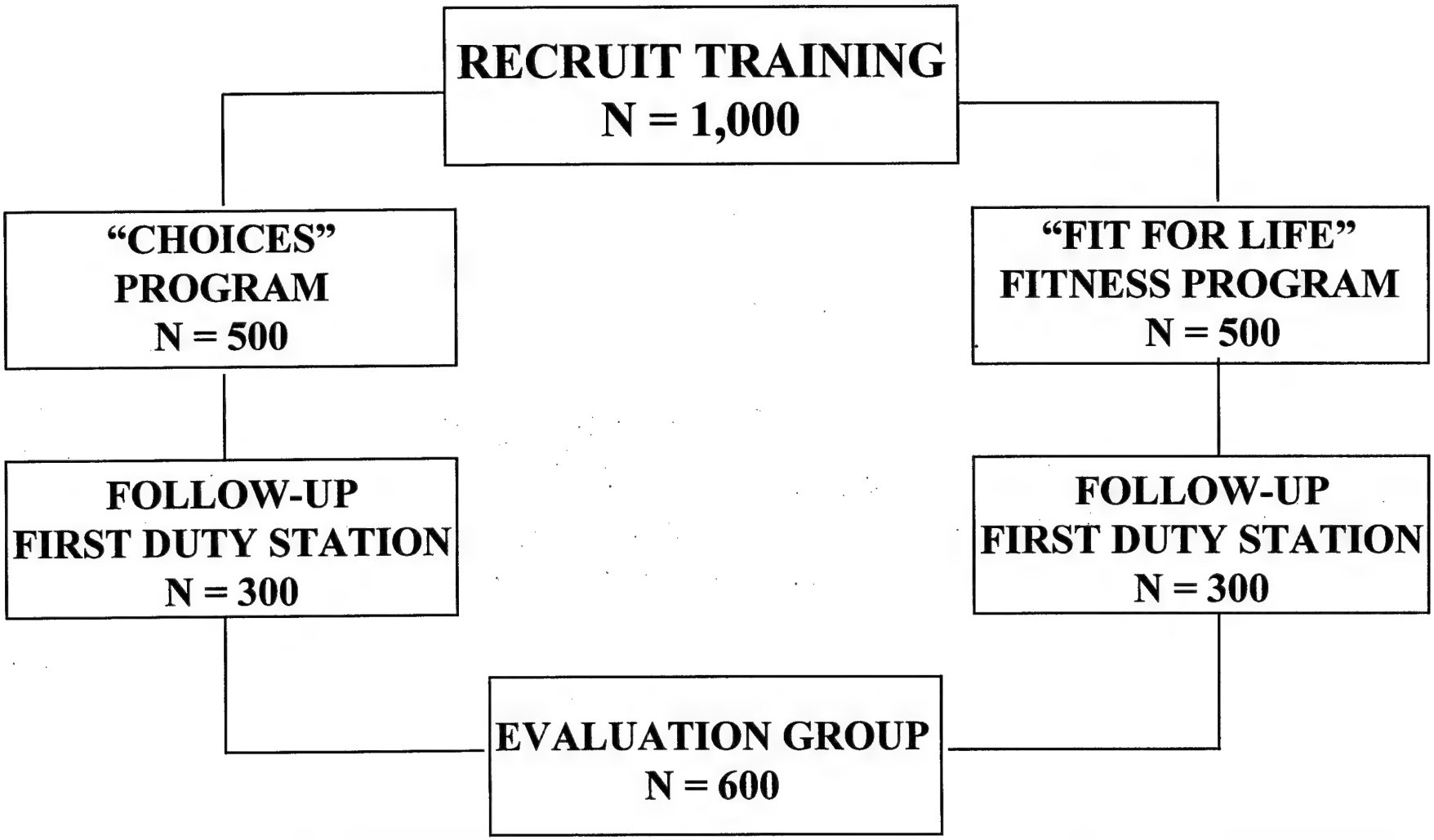
Date	Signature of Study Participant
Date	Signature of Person Obtaining Consent

7-30-98 11:30 am

APPENDIX G:

Study Design

STUDY DESIGN



APPENDIX H:

Study Timeline

PROGRAM TIMELINE

RECRUIT TRAINING	MCT	FIRST DUTY STATION
BASELINE	**5 WEEKS**	**6-9 MONTHS**
Recruitment	--	--
Questionnaire	--	--
STD/Pregnancy Screening	STD/Pregnancy Screening	STD/Pregnancy Screening
Programs		
"Choices"	--	--
"Fitness for Life"	--	--

APPENDIX I:

Request and Justification for Additional Support

MEMO from Mary-Ann Shafer, MD

Division of Adolescent Medicine
University of California
400 Parnassus Room AC-01
San Francisco, CA 94143-0503

Tel: 415-476-2184 -
Voice: 415-476-4384
FAX: 415-476-6106
Email: shafer@itsa.ucsf.edu
Home: 415-383-8435

TO: LT COL Karl Friedle
Tel: 301-619-7304
Fax: 301-619-2416

RE: Defense Women's Initiative: DAMD 17-95-C-5077 grant:
Intervention to Decrease Risk for STDs and Unintended Pregnancies in Active Duty Military Women (Marine Recruits)
MA Shafer, Principal Investigator

DA: May 6, 1998

LT COL Friedle:

Per CMDR Rick Shaffer, Co-Investigator on this grant, I am submitting a proposal to support the need to expand the project listed above due to the nature of the request for integration into the curriculum in the recruit training for women Marines at Parris Island, S.C. The location, target population, and intensity of the intervention has been expanded greatly and can not be supported on our original approved budget for Year 4. Below is a summary in abbreviated form to help outline the changes and needs of the project:

- Original research plan had been to implement the intervention in active duty women Marines at Camp Pendleton, San Diego California. The Time 1 would have been implemented at one time to all participating women. Personnel would have included staff at NHRC (Navy) and UCSF since it would have only taken one to two weeks to implement as all the targeted women are in place and available. However, this changed dramatically when we presented our proposal to Marine General Mutter earlier this year who wanted us to revisit the population and evaluate the need for risk at the recruit level. To do this we had to begin again and do elicitation research with the young Marines and officers at Parris Island, S.C. and begin to reformulate the entire design plan. Because this is such an important and high risk population for the targeted risks (7% chlamydia infection rate and approximately 50% fall out rate before the first tour of duty is completed due to sexuality and pregnancy related issues, among others), it was obvious that changing course was definitely the thing to do. The long range plan as we have done successfully with our previous male Marine intervention is to incorporate our risk reduction intervention systemwide. Clearly , the most at risk population identified among

the women Marines are the recruits as they transition into schools and their first tour of duty where most find themselves in socially difficult situation where they may be the only woman among many men and feel ill prepared to deal with the pressures resulting in high risk behaviors. Our intervention now targets this population.

- Materials, manuals, video, and didactic teaching slides have been developed and need to be piloted; some materials will have to be changed as the Marines want our intervention totally integrated into their Marine Recruit Training for women; this will require extensive review of the current Marine materials and editing of our materials to incorporate similar teaching modules already in existence in the Marine materials. These revisions will be done by Boyer and Shafer in close coordination with the staff at Parris Island.

- We have received full support from the staff of the Fourth Battalion (Women Marine Recruit Training program) at Parris Island who wish us to start as soon as possible. Current target date to begin enrollment is Summer, 1998.

- Personnel needs have greatly changed from the original plan. We are now required to have a "rolling enrollment and implementation" of the intervention since approximately 80-100 women Marines arrive every two weeks to begin basic training. This will require having a staff work full time one week and have down time the alternate week. The active week will involve enrollment, administering the questionnaire, obtaining the urine sample for STDs and pregnancy testing and beginning the 4 module, 8 hour sessions. The sessions will be staggered over the 10 week training time at Parris Island. To do this we will need a Parris Island Project Coordinator and 4 part time health educators. For year 1. As the project is followed up in the schools and to the first tour of duty (approximately 6-9 months after the intervention), we need personnel to administer follow-up questionnaires and obtain urine samples again at two points: after Marine Combat Training at Camp LeJeune in North Carolina (all recuits go to Marine Combat Training after boot camp) and then at the schools and first tour of duty (determined that most women go to Okinawa, San Diego area and North Carolina). We therefore need personnel (project coordinators) at each of these locations to do all the follow-ups needed which will be conducted every 1-2 weeks as the women complete a 6-9 month follow up period.

- Transportation of STD specimens to the research lab of UCSF in included in the budget.

- Travel for coordination, quality control and training is necessary and included at all sites to ensure the highest quality of a complicated behavioral and biologic study as this one with a rolling enrollment, implementation and follow-up.

- Year 4 budget has combined the originally approved budget plus the new items needed to meet the new expanded mission. I have highlighted the new areas and expenses in bold.

- Year 5 has been added in order to complete the follow-ups and the analysis of this large project

In summary, this project as redesigned is much stronger scientifically, is well accepted by the Marine officers and recruits, sets itself up for automatic incorporation into training if it is successful, and meets the needs of the Marines to fulfill their goal to decrease risk for STDs, unplanned pregnancy and loss of good Marine women before completing their first tour of duty due to problems associated with risk behaviors and negative reproductive health outcomes including STDs and their sequelae of pelvic inflammatory disease and ectopic pregnancy.

If you need some immediate questions answered, I am working at home today and will be happy to assist you. I had to prepare this budget myself as my assistant is out ill so please excuse the format. I look forward to discussing this with you as this is so important to complete at this point as we are the only group implementing an intervention like this in women military. mas

MEMO from Mary-Ann Shafer, MD

Division of Adolescent Medicine
University of California
400 Parnassus Room AC-01
San Francisco, CA 94143-0503

Tel: 415-476-2184 -
Voice: 415-476-4384
FAX: 415-476-6106
Email: shafer@itsa.ucsf.edu
Home: 415-383-8435

TO: LT COL Karl Friedle
Tel: 301-619-7304
Fax: 301-619-2416

CC: Juantia Bourne, LT CMDR Shaffer

RE: Defense Women's Initiative: DAMD 17-95-C-5077 grant:
Intervention to Decrease Risk for STDs and Unintended Pregnancies in Active Duty Military Women (Marine Recruits)
MA Shafer, Principal Investigator

DA: May 7, 1998

LT COL Friedle:

On reviewing my fax to you yesterday, I realized that I may not have been as clear in separating out what funds we have available and what additional support is needed to implement the expanded intervention. I revised the estimated budget to highlight these differences even more. I underlined the additional funds requested in Year 4. The total additional direct costs requested for Year 4 is $195899 of which most of the amount is in personnel. The newly proposed Year 5 is attached also.

I realize that if you are interested in supporting the expanded effort, we wi need to discuss the estimated budget. Without additional support we will not be able to complete the project. If there is anything else I can clarify, please let me know. LT CMDR Rick Shaffer has a copy of the budget as well and I have discussed it with him. I will try to email you these documents as well as the fax does not always relay the numbers clearly.

REVISED SEPARATING OUT CURRENT YEAR 4 AUGUST, 1998-99, (DAMD 17-95-C-5077) FROM REQUESTED ADDITIONAL FUNDS FOR AUGUST 1998-1988 AND 1999-2000 REVISED MAY 7, 1998

Proposed Budget for Implementation and Evaluation Phases of DWRP Women's Project to Prevent Unintended Pregnancies and STDs Among Women Marines

Overview of Year 4 and Proposed new Year 5 of Expanded Activities and Budget

Date: May 5, 1998;
Timeline: July 1998-June 2000
Focus: Implementation and analysis of Project intervention
Year 1: months 1-12: intervention implementation
Year 2: months 13-24: finish follow-up of intervention and analyze data and prepare results for manuscript

Year 4 (Revised): Train the Trainers and Implement the Intervention

Personnel:

NAME	Role on Project	Type Appt	% Effort on Project	Base Salary	Salary Requested	Fringe Benefits	TOTALS
MA Shafer*	Prin. Invest.	12 m.	30%	$137500	$41250	$80844	$49294
CB Boyer*	Co-P.I.	12 m.	60%	$ 95902	$57541	$11221	$68761
J Schachter	Co-P.I.	12 m.	5%	-0-	-0-	-0-	-0-
S Brodine	Co-P.I.	12 m.	10%	-0-	-0-	-0-	-0-
R Shaffer	Co-P.I.	12 m.	10%	-0-	-0-	- 0-	-0-
A Kung (replace M Lau)	Proj. Coord-S.F.	12 m.	30%	$ 37770	$11378	$2935	$14313
Tba	Biostatistician	12 m.	25%	$ 45000	$11766	$3035	$14801
Tba	***Pr. Coord-N.C.***	***12 m.***	***50%***	***$ 40000***	***$20000***	***$5100***	***$25100***
Tba	***Pr. Coord-S.C.***	***12 m.***	***50%***	***$ 40000***	***$20000***	***$5100***	***$25100***
Tba	***Pr. Coord-San Diego, Okinawa***	***12 m.***	***50%***	***$ 40000***	***$20000***	***$5100***	***$25100***
Tba	***Health educ. A***	***9 m.***	***50%***	***$ 45000***	***$16775***	***$4303***	***$21178***
Tba	***Health educ. B***	***9 m.***	***50%***	***$ 45000***	***$16775***	***$4303***	***$21178***
Tba	***Health educ. C***	***9 m.***	***50%***	***$ 45000***	***$16775***	***$4303***	***$21178***
Tba	***Health educ. D***	***9 m.***	***50%***	***$ 45000***	***$16775***	***$4303***	***$21178***

(*reflects 10% increase representing promotion raise and cost of living increase)

Total Personnel Salary and Benefits in Year 4	$307181
Total Personnel Salary and Benefits in Year 4 supported by current DAMD	$102231
Additional funds requested in Salary and Benefits in Year 4	**$160012**

(Proposed Budget for Implementation and Evaluation Phases of DWRP Women's Project to Prevent Unintended Pregnancies and STDs Among Women Marines Con'd Year 4)

Transportation of Specimens

Fedex on dry ice overnight (discounted price)

1. 40 pick ups (approximately every 2 weeks): Parris Island SC, MCT and Schools in North Carolina, and San Diego bases @ $50/pack	***$ 2000***
2. 3 pick ups from Okinawa Japan @ $120/pack	***$ 660***
Additional Costs for Specimen Transportation to San Francisco Lab	**$ 2660**
Total Consultant: Barbara Bales (27 hours @ $22/hr)	$ 594
Total Equipment	-0-
Total Supplies Paper, computer disks, printer/toner cartridges, computer and fax paper	$ 808
Additional Costs for Consultant, Equipment, Supplies (none)	**-0-**

Travel:

To set up, train and supervise recruitment and implementation and follow-up: Travel budget represents costs for travel for 2 persons (Boyer and Shafer)

1. ***Trip to set up recruitment and implementation of intervention at Parris Island Marine Recruitment Base in South Carolina 3-days including airfare, per diem, car rental, motel, ground***	***$ 3000***
2. ***Trip to Parris Island, S.C. to train the trainers/health educators For 1 week***	***$ 4000***
3. ***Interim visit to supervise coordinator and ensure quality control at Marine Combat Training at Camp LeJeune, N.C. (3 days)***	***$ 3000***
4. Trip to Okinawa, Japan to supervise coordinator and ensure quality control (5 days)	***$ 5000***
5. Quarterly mtgs-San Diego for quality control, review analysis	$ 3252
6. Navy R/D Bethesda (Shafer, Boyer, 1 trip to review progress)	$ 2400
7. Attend scientific meeting to present results (PI)	$ 1800
Total Travel in Year 4	$ 21552
Total Travel in Year 4 supported by current DAMD	$ 6552
Additional Travel Costs Requested	**$ 15000**

ADDITIONAL DIRECT COSTS REQUESTED IN YEAR 4	**$177672**
(Total Direct Costs in Year 4 (current DAMD funds plus requested)	$333695)
ADDITIONAL INDIRECT COSTS REQUESTED I N YEAR 4 @ 26% INDIRECT OFF CAMPUS RATE	**$ 46195**
(Total Indirect Costs in Year 4 (current DAMD funds plus requested)	$ 86760
ADDITIONAL DIRECT AND INDIRECT COST REQUEST ESTIMATE	**$223867**
(TOTAL DIRECT AND INDIRECT COST ESTIMATE YEAR 4:	$420457)

REVISED MAY 7, 1998
Proposed Budget for Implementation and Evaluation Phases of DWRP Women's Project to Prevent Unintended Pregnancies and STDs Among Women Marines:

Year 5 (Newly proposed year funding) Project Follow-up and Analysis Phase

Personnel:

NAME	Role on Project	Appt	Type on Project	% Effort Salary	Base Salary Requested	Salary Benefits	Fringe TOTALS
MA Shafer*	Prin. Invest.	12 m.	30%	$137500	$41250	$80844	$49294
CB Boyer*	Co-P.I.	12 m.	60%	$ 95902	$57541	$11221	$68761
J Schachter	Co-P.I.	12 m.	5%	-0-	-0-	-0-	-0-
S Brodine	Co-P.I.	12 m.	10%	-0-	-0-	-0-	-0-
R Shaffer`	Co-P.I.	12 m.	10%	-0-	-0-	- 0-	-0-
A Kung (replace M Lau)	Proj. Coord-S.F.	12 m.	30%	$ 37770	$11378	$2935	$14313
Tba	Biostatistician	12 m.	25%	$ 45000	$11766	$3035	$14801
Tba	Data Manager	12 m.	25%	$ 40000	$10000	$2550	$12550
Tba	Pr. Coord-N.C.	6 m.	50%	$ 40000	$10000	$2550	$12550
Tba	Pr. Coord-S.C.	6 m.	50%	$ 40000	$10000	$2550	$12550

Total Personnel Costs in Year 5 $184,819

Transportation of Specimens
Fedex on dry ice overnight (discounted price)
2. *26 pick ups (approximately every 2 weeks): Parris Island SC, MCT and Schools in North Carolina, and San Diego bases @ $50/pack* $ 1,300
2. *4 pick ups from Okinawa Japan @ $120/pack* $ 780
Total Cost for Specimen Transportation to San Francisco Lab $ 2,080

Travel:
1. *1 trip 2 persons (Shafer and Boyer) Camp LeJeune, N.C. for supervision of coordinator and quality control x 3 days* $ 3000
2. *3 trips (once every 3 months) to San Diego to supervise coordinator and ensure quality control and for consultation on data analysis and manuscript preparation with Naval Health Research colleagues, 2 persons(Boyer and Shafer) 3 days each @ $ 1,000/person/trip* $ 6000

Total Travel Costs in Year 5 $ 9000

TOTAL DIRECT COST REQUEST ESTIMATE FOR YEAR 5 **$195899**

TOTAL INDIRECT COSTREQUEST FOR YEAR 5 @ 26% OFF CAMPUS RATE **$ 50934**

TOTAL DIRECT AND INDIRECT COST REQUEST ESTIMATE FOR YEAR 5 **$246833**